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Descrizione fisica	1 online resource (XIII, 135 p. 19 illus., 2 illus. in color.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2203
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Soggetti	Probabilities Operations research Management science Probability Theory and Stochastic Processes Operations Research, Management Science
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Nota di contenuto	Introduction -- Technical Prerequisites -- First Crossing by Poisson Processes -- First Crossing by Compound Poisson Processes -- Telegraph Processes -- Sequential Estimation -- First Crossing a Random Process -- Failure Times of Deterioration Processes -- Miscellaneous Topics.
Sommario/riassunto	This monograph is focused on the derivations of exact distributions of first boundary crossing times of Poisson processes, compound Poisson processes, and more general renewal processes. The content is limited to the distributions of first boundary crossing times and their applications to various stochastic models. This book provides the theory and techniques for exact computations of distributions and moments of level crossing times. In addition, these techniques could replace simulations in many cases, thus providing more insight about the phenomenona studied. This book takes a general approach for studying telegraph processes and is based on nearly thirty published papers by the author and collaborators over the past twenty five years. No prior knowledge of advanced probability is required, making the book widely available to students and researchers in applied

probability, operations research, applied physics, and applied mathematics. .