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Nota di contenuto	Intro -- RECORDS AND BRANCHING PROCESSES -- RECORDS AND BRANCHING PROCESSES -- CONTENTS -- PREFACE -- CONTRIBUTORS AND AFFILIATION -- Chapter 2CHARACTERIZATIONS OF DISTRIBUTIONS VIABIVARIATE REGRESSION ON DIFFERENCES OF RECORDS -- Abstract -- 1 Introduction -- 2 Results and Proofs -- 2.1 Main result -- Acknowledgment -- References -- Chapter 3REGENERATIVE BRANCHING PROCESSES -- Abstract -- 1 Introduction -- 2 General Definition -- 3 BGW Processes with State-dependent Immigration -- 4 Continuous Time Markov Processes -- 5 Age-Dependent Branching Processes -- 6 Alternating Regenerative Processes -- 7 Continuous-State Branching Processes -- 8 Branching Processes with Migration -- 9 Time Non-Homogeneous State-Dependent Immigration -- 10 Concluding Remarks -- References -- Chapter 4CONDITIONAL LIMIT THEOREMS FOR CONTINUOUS TIME AND STATE BRANCHING PROCESS -- Abstract -- 1 Introduction -- 2 The CB-Process -- 3 Attaining the Origin -- 4 The Critical Case -- 5 Stationary Measures -- 6 The Subcritical Case -- 7 The Last Large Jump -- References -- LARGE FAMILIES AND EXCEEDANCES IN BRANCHING PROCESSES -- Abstract -- 1 Introduction -- 2 Exceeding a Threshold -- 2.1 Sequence of processes with common offspring distribution -- 2.2 Sequence of processes with distinct offspring distributions -- 2.3 Extended class of

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3.2 Processes with Varying Geometric Environments -- 4 Maxima in Bisexual Processes -- 4.1 Max-Domain of Attraction of Bivariate Geometric Arrays -- 4.2 Bisexual Processes with Varying Geometric Environments -- 5 Maximum Score -- 5.1 Maximum Scores in Galton-Watson Processes -- 5.2 Maximum Scores in Two-Type Processes -- Acknowledgment -- References -- Chapter 7STATISTICAL INFERENCE FOR BRANCHING PROCESSES -- Abstract -- 1 Introduction -- 2 Classical BGW Branching Processes -- 3 BGW Processes with an Increasing Random Number of Ancestors -- 3.1 Estimating the Offspring Mean when $Z_0(n) \rightarrow n$ a.s. -- 3.4 Lotka-Nagaev Estimators -- 3.5 Heyde Moment-Type Estimators -- 3.6 Estimating the Unknown Age of the Process -- 3.7 Conditional Least Squares Estimators -- 3.8 Censored Estimators -- 3.2 Limiting Distributions -- 3.3 Harris Estimators -- 4 BGW Processes with Immigration -- 5 Concluding Remarks and Comments -- References -- INDEX.

Sommario/riassunto

This book concerns itself with record values and branching processes as rich research areas of applied probability and statistics. Over the last few decades, numerous interesting articles on these topics appeared, dealing with theoretical problems as well as a number of new applications. The authors have co-ordinated publishing works contributed by eminent researchers from all over the world. This book presents a selection of presentations of new developments and survey papers on the subjects of record values and branching processes. It is written at intermediate level which requires knowledge of probability theory and mathematical statistics.
