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Nota di contenuto	1 Probabilistic Foundations -- 2 Random variables and their quantitative characteristics -- 3 Expectations and convergence of sequences of random variables -- 4 Weak convergence of sequences of random variables -- 5 Absolute continuity of probability measures and conditional expectations -- 6 Discrete time stochastic analysis: basic results -- 7 Discrete time stochastic analysis: further results and applications -- 8 Elements of classical theory of stochastic processes -- 9 Stochastic differential equations, diffusion processes and their applications -- 10 General theory of stochastic processes under "usual conditions" -- 11 General theory of stochastic processes in applications -- 12 Supplementary problems -- References -- Index.
Sommario/riassunto	The main subject of the book is stochastic analysis and its various applications to mathematical finance and statistics of random processes. The main purpose of the book is to present, in a short and sufficiently self-contained form, the methods and results of the contemporary theory of stochastic analysis and to show how these methods and results work in mathematical finance and statistics of random processes. The book can be considered as a textbook for both senior undergraduate and graduate courses on this subject. The book

can be helpful for undergraduate and graduate students, instructors
and specialists on stochastic analysis and its applications.
