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Autore	Privault Nicolas
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Sommario/riassunto	This volume gives a unified presentation of stochastic analysis for continuous and discontinuous stochastic processes, in both discrete and continuous time. It is mostly self-contained and accessible to graduate students and researchers having already received a basic training in probability. The simultaneous treatment of continuous and jump processes is done in the framework of normal martingales; that includes the Brownian motion and compensated Poisson processes as specific cases. In particular, the basic tools of stochastic analysis (chaos representation, gradient, divergence, integration by parts) are presented in this general setting. Applications are given to functional and deviation inequalities and mathematical finance.