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	Altri autori (Persone)	RubinoGerardo <1955-> TuffinBruno
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	Nota di contenuto	Rare Event Simulation using Monte Carlo Methods; Contents; Contributors; Preface; 1 Introduction to Rare Event Simulation; PART I THEORY; 2 Importance Sampling in Rare Event Simulation; 3 Splitting Techniques; 4 Robustness Properties and Con.dence Interval Reliability Issues; PART II APPLICATIONS; 5 Rare Event Simulation for Queues; 6 Markovian Models for Dependability Analysis; 7 Rare Event Analysis by Monte Carlo Techniques in Static Models; 8 Rare Event Simulation and Counting Problems; 9 Rare Event Estimation for a Large-Scale Stochastic Hybrid System with Air Traffic Application 10 Particle Transport Applications11 Rare Event Simulation Methodologies in Systems Biology; Index
	Sommario/riassunto	In a probabilistic model, a rare event is an event with a very small

probability of occurrence. The forecasting of rare events is a formidable task but is important in many areas. For instance a catastrophic failure in a transport system or in a nuclear power plant, the failure of an information processing system in a bank, or in the communication network of a group of banks, leading to financial losses. Being able to evaluate the probability of rare events is therefore a critical issue. Monte Carlo Methods, the simulation of corresponding models, are used to analyze rare events. This book s