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Nota di contenuto	1 -- Some Elements of Linear-Quadratic Optimal Controls -- 2. Linear-Quadratic Two-Person Dierential Games -- 3. Mean-Field Linear-Quadratic Optimal Controls. .
Sommario/riassunto	This book gathers the most essential results, including recent ones, on linear-quadratic optimal control problems, which represent an important aspect of stochastic control. It presents results for two-player differential games and mean-field optimal control problems in the context of finite and infinite horizon problems, and discusses a number of new and interesting issues. Further, the book identifies, for the first time, the interconnections between the existence of open-loop and closed-loop Nash equilibria, solvability of the optimality system, and solvability of the associated Riccati equation, and also explores the open-loop solvability of mean-filed linear-quadratic optimal control problems. Although the content is largely self-contained, readers

should have a basic grasp of linear algebra, functional analysis and stochastic ordinary differential equations. The book is mainly intended for senior undergraduate and graduate students majoring in applied mathematics who are interested in stochastic control theory. However, it will also appeal to researchers in other related areas, such as engineering, management, finance/economics and the social sciences.