Record Nr. UNINA9910366611303321 Autore Ma Zhongjing Titolo Corrosion, High-Temperature Coatings, Non-Classical Strength Calculations, and Methods of Ensuring the Reliability of Gas Turbine Unit / / by Zhongjing Ma Singapore:,: Springer Nature Singapore:,: Imprint: Springer., 2020 Pubbl/distr/stampa **ISBN** 981-13-7652-2 Edizione [1st ed. 2020.] 1 online resource (XXI, 238 p. 89 illus., 1 illus. in color.) Descrizione fisica Disciplina 621.317 Soggetti Electric power production Automatic control Automotive engineering Game theory **Electrical Power Engineering** Control and Systems Theory Automotive Engineering Game Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Introduction -- Charging coordination via non-cooperative games -Decentralized Charging coordination with battery degradation cost -Charging coordination in capacity-constrained distribution networks -Charging coordination based on auction games -- V2G coordination
method via auction games.

Sommario/riassunto This book focuses on the design of decentralized optimization methods

applied to charging strategies for large-scale PEVs in electrical power systems. It studies several classes of charging coordination problems in large-scale PEVs by considering the distinct characteristics of PEV populations and electrical power systems, and subsequently designs decentralized methods based on distinct optimization schemes – such as non-cooperative games, mean-field games, and auction games – to achieve optimal/nearly optimal charging strategies. In closing, several performance aspects of the proposed algorithms, such as their convergence, computational complexity and optimality etc., are

rigorously verified and demonstrated in numerical simulations. Given its scope, the book will benefit researchers, engineers, and graduate students in the fields of optimization, game theory, auction games, electrical power systems, etc., and help them design decentralized methods to implement optimal charging strategies in large-scale PEVs.