

1. Record Nr.	UNINA9910131493103321
Autore	Li Shaoyuan
Titolo	Distributed model predictive control for plant-wide systems // Shaoyuan Li and Yi Zheng, Shanghai Jiao Tong University, China
Pubbl/distr/stampa	Singapore : , : John Wiley & Sons, , 2015 ©2015
ISBN	1-118-92159-3 1-118-92157-7 1-118-92158-5
Descrizione fisica	1 online resource (330 p.)
Disciplina	629.8
Soggetti	Predictive control - Mathematical models Large scale systems - Data processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Model predictive control -- Control structure of distributed MPC -- Structure model and system decomposition -- Local cost optimization based distributed predictive control -- Cooperative distributed predictive control -- Networked distributed predictive control with information structure constraints -- Local cost optimization based distributed predictive control with constraints -- Cooperative distributed predictive control with constraints -- Networked distributed predictive control with inputs and information structure constraints -- Hot-rolled strip laminar cooling process with distributed predictive control -- High speed train control with distributed predictive control -- Operation optimization of multi-type cooling source system based on distributed model predictive control.
Sommario/riassunto	A comprehensive examination of DMPC theory and its technological applications A comprehensive examination of DMPC theory and its technological applications from basic through to advanced level A systematic introduction to DMPC technology providing classic DMPC coordination strategies, analysis of their performance, and design methods for both unconstraint and constraint systems Includes the system partition methods, coordination strategies, the performance

analysis and how to design stabilized DMPC under different coordination strategies. Presents useful theories and technologies which can
