

1. Record Nr.	UNINA9910254167603321
Autore	Ellis Matthew
Titolo	Economic Model Predictive Control : Theory, Formulations and Chemical Process Applications / / by Matthew Ellis, Jinfeng Liu, Panagiotis D. Christofides
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-41108-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XXIV, 292 p. 95 illus., 16 illus. in color.)
Collana	Advances in Industrial Control, , 1430-9491
Disciplina	620
Soggetti	Control engineering Chemical engineering Production management Control and Systems Theory Industrial Chemistry/Chemical Engineering Production
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Introduction -- Background on Nonlinear Systems, Control, and Optimization -- Brief Overview of EMPC Methods and some Preliminary Results -- Lyapunov-Based EMPC -- State Estimation and EMPC -- Two-Layer EMPC Systems -- EMPC Systems: Computational Efficiency and Real-Time Implementation.
Sommario/riassunto	This book presents general methods for the design of economic model predictive control (EMPC) systems for broad classes of nonlinear systems that address key theoretical and practical considerations including recursive feasibility, closed-loop stability, closed-loop performance, and computational efficiency. Specifically, the book proposes: Lyapunov-based EMPC methods for nonlinear systems; two-tier EMPC architectures that are highly computationally efficient; and EMPC schemes handling explicitly uncertainty, time-varying cost functions, time-delays and multiple-time-scale dynamics. The proposed methods employ a variety of tools ranging from nonlinear

systems analysis, through Lyapunov-based control techniques to nonlinear dynamic optimization. The applicability and performance of the proposed methods are demonstrated through a number of chemical process examples. The book presents state-of-the-art methods for the design of economic model predictive control systems for chemical processes. In addition to being mathematically rigorous, these methods accommodate key practical issues, for example, direct optimization of process economics, time-varying economic cost functions and computational efficiency. Numerous comments and remarks providing fundamental understanding of the merging of process economics and feedback control into a single framework are included. A control engineer can easily tailor the many detailed examples of industrial relevance given within the text to a specific application. The authors present a rich collection of new research topics and references to significant recent work making Economic Model Predictive Control an important source of information and inspiration for academics and graduate students researching the area and for process engineers interested in applying its ideas.

2. Record Nr.	UNINA9910164986303321
Autore	Tina Charlebois Tina
Titolo	Conjugaison des Leurres
Pubbl/distr/stampa	Naperville : , : Éditions l'Interligne, , 2017 ©2017
ISBN	9782896995318 2896995315
Edizione	[1st ed.]
Descrizione fisica	1 online resource (100 pages)
Altri autori (Persone)	André CharleboisAndré
Soggetti	French-Canadian poetry - 21st century
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Première de couverture -- Faux titre -- Page titre -- Catalogage -- Les teints écart-lettres -- La guillotine quotidienne -- Si on se constituait un pays... -- Les guerriers urbains au naturel -- Survivre pour ne pas

