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Descrizione fisica	1 online resource (372 p.)
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Classificazione	VN 7330
Disciplina	660/.2815
Soggetti	Process control Systems engineering
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 at the end of each chapters and index.
Nota di contenuto	Frontmatter -- Foreword -- Contents -- Part I: Introduction -- 1. History of process control -- 2. Basics of systems theory -- 3. Mathematical modeling -- 4. Systems dynamics -- 5. Manual and automatic control [1] -- Part II: Analysis of the feedback control system -- 6. The controlled process -- 7. Transducers and measuring systems -- 8. Controllers -- 9. Final control elements (actuating devices) -- 10. Safety interlock systems -- Part III: Synthesis of the automatic control systems -- 11. Design and tuning of the controllers -- 12. Basic control loops in process industries -- Index
Sommario/riassunto	Basic Process Engineering Control is based on the extensive experience of the authors in the field of industry, teaching and writing. The textbook showcases methods, problems, and tools used in this well-established field of chemical engineering and goes beyond traditional process engineering by applying the same principles to biomedical processes, energy production, and management of environmental issues. Starting from the behavior of processes, Basic Process Engineering Control explains all determinations in "chemical systems" or "process systems", such as the intricate inter dependency of the process stages, analyzing the hardware components of a control

system, and the design of an appropriate control system for a process parameter or a whole process. Although mainly aimed at students and graduates, the book is equally interesting to chemical or process engineers in all industries or research and development centers. Readers will notice the similarity in approach from the system and control point of view between different fields, which might otherwise seem far from each other but share the same control philosophy.

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