1. Record Nr. UNISA990002240280203316

Autore	LUDWIG, Heinrich
Titolo	Die kirche im Prozeß der gesellschaftlichen differenzierung / Heinrich Ludwig
Pubbl/distr/stampa	München : Kaiser-Grünewald, 1976
Descrizione fisica	205 p. ; 21 cm
Disciplina	301.5
Collocazione	II.2. 5380 (IG VI 514)
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910484408503321

Autore	Hernández-Guzmán Victor Manuel
Titolo	Automatic Control with Experiments / / by Victor Manuel Hernández-Guzmán, Ramón Silva-Ortigoza
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-319-75804-7
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XVI, 992 p. 633 illus., 91 illus. in color.)
Collana	Advanced Textbooks in Control and Signal Processing, , 1439-2232
Disciplina	629.8
Soggetti	Automatic control System theory Power electronics Industrial engineering Production engineering Control and Systems Theory Systems Theory, Control Power Electronics, Electrical Machines and Networks Industrial and Production Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa

Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Physical system modeling -- Chapter 3: Ordinary linear differential equations -- Chapter 4: Stability criteria and steady state error -- Chapter 5: Time response-based design -- Chapter 6: Frequency response-based design -- Chapter 7: The state variables approach -- Chapter 8: Advanced topics in control -- Chapter 9: Feedback electronic circuits -- Chapter 10: Velocity control of a PM brushed DC motor -- Chapter 11: Position control of a PM brushed DC motor -- Chapter 12: Control of a servomechanism with flexibility -- Chapter 13: Control of a magnetic levitation system -- Chapter 14: Control of a ball and beam system -- Chapter 15: Control of a Furuta pendulum -- Chapter 16: Control of an inertia wheel pendulum -- A: Fourier and Laplace transforms -- B: Bode diagrams -- C: Decibels, dB -- D: Magnetically coupled coils -- E: Euler-Lagrange equations subject to constraints -- F: Numerical implementation of controllers -- G: MATLAB/Simulink code used for some simulations -- Index.
Sommario/riassunto	This textbook presents theory and practice in the context of automatic control education. It presents the relevant theory in the first eight chapters, applying them later on to the control of several real plants. Each plant is studied following a uniform procedure: a) the plant’s function is described, b) a mathematical model is obtained, c) plant construction is explained in such a way that the reader can build his or her own plant to conduct experiments, d) experiments are conducted to determine the plant’s parameters, e) a controller is designed using the theory discussed in the first eight chapters, f) practical controller implementation is performed in such a way that the reader can build the controller in practice, and g) the experimental results are presented. Moreover, the book provides a wealth of exercises and appendices reviewing the foundations of several concepts and techniques in automatic control. The control system construction proposed is based on inexpensive, easy-to-use hardware. An explicit procedure for obtaining formulas for the oscillation condition and the oscillation frequency of electronic oscillator circuits is demonstrated as well.