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	Nota di contenuto	. Dynamic model of a wind turbine for the electric energy generation -- 2. An electricity generator based on the interaction of static and dynamic magnets -- 3. Dynamic model of an electric vehicle with energy recovery -- 4. Modeling and control of a fuel cell -- 5. Dynamic model with sensor and actuator for a transelevator -- 6. Dynamic model with sensor and actuator for an articulated robotic arm -- 7. Inverse dynamics model of a delta-type parallel robot -- 8. Acquisition system and approximation of brain signals -- 9. A method for online pattern recognition of abnormal eye movements -- 10. A method with neural networks for the classi.cation of fruits and vegeta-bles.
	Sommario/riassunto	Dynamic models are essential for understanding the system dynamics. It is of importance because one mistake in experiments could cause accidents or damages, while one mistake in the simulation of dynamic models could cause nothing. Each system has a different dynamic model; hence, this book presents the designs of 10 dynamic models which are mainly classified in two ways. The first kind of dynamic

models are mainly obtained by the Euler Lagrange method and described by differential equations. The second kind of dynamic models are mainly obtained by the neural networks and described by difference equations. Topics and features: Contains the dynamic models of energy systems Derives dynamic models of energy systems by the Euler Lagrange method Includes the dynamic models of robotic systems Contains the dynamic models of biological systems Derives dynamic models of robotic systems by the Euler Lagrange method Obtains dynamic models of biological systems by neural networks This book is expected to be used primary by researchers and secondary by students and in the areas of control, robotics, energy, biological, mechanical, mechatronics, and computing systems. Jose de Jesus Rubio, Alejandro Zacarias, and Jaime Pacheco are full Professors affiliated with the ESIME Azcapotzalco, Instituto Politécnico Nacional, Sección de Estudios de Posgrado e Investigación, Ciudad de México, México.