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Sommario/riassunto	"This book provides the theoretical foundations required to design this class of controllers in diverse practical control applications. To that end, the authors present several systematic methodologies of control design and their formal justification in term of passivity and Lyapunov Theory. The first chapters cover the general framework for PID-PBC design for nonlinear systems, and subsequent chapters introduce the specialization of the control design to broad range of practical applications, including power electronic, electrical drives, electrical circuits and mechanical and process control systems. Additionally, fundamental concepts related to PID regulators, passivity theory, Lyapunov stability and port-Hamiltonian systems are revisited."--