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	Nota di contenuto	A Survey of Robust Adaptive Critic Control Design -- Robust Optimal Control of Nonlinear Systems with Matched Uncertainties -- Observer-Based Online Adaptive Regulation for a Class of Uncertain Nonlinear Systems -- Adaptive Tracking Control of Nonlinear Systems Subject to Matched Uncertainties -- Event-Triggered Robust Stabilization Incorporating an Adaptive Critic Mechanism -- An Improved Adaptive Optimal Regulation Framework with Robust Control Synthesis -- Robust Stabilization and Trajectory Tracking of General Uncertain Nonlinear Systems -- Event-Triggered Nonlinear H Control Design via an Improved Critic Learning Strategy -- Intelligent Critic Control with Disturbance Attenuation for a Micro-Grid System -- Sliding Mode Design for Load Frequency Control with Power System Applications.
	Sommario/riassunto	This book intends to report new optimal control results with critic intelligence for complex discrete-time systems, which covers the novel control theory, advanced control methods, and typical applications for wastewater treatment systems. Therein, combining with artificial intelligence techniques, such as neural networks and reinforcement learning, the novel intelligent critic control theory as well as a series of

advanced optimal regulation and trajectory tracking strategies are established for discrete-time nonlinear systems, followed by application verifications to complex wastewater treatment processes. Consequently, developing such kind of critic intelligence approaches is of great significance for nonlinear optimization and wastewater recycling. The book is likely to be of interest to researchers and practitioners as well as graduate students in automation, computer science, and process industry who wish to learn core principles, methods, algorithms, and applications in the field of intelligent optimal control. It is beneficial to promote the development of intelligent optimal control approaches and the construction of high-level intelligent systems.