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Altri autori (Persone)	ArenaPaolo <1966-> FortunaL <1953-> (Luigi)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminaries; Preface; Contents; 1. Introduction; 2. CNN-based Central Pattern Generators; 3. CNN-based CPGs with sensory feedback and VLSI implementation; 4. Decentralized locomotion control; 5. A gallery of bio-inspired robots; 6. High-level analog control: attitude control and Motor Maps; 7. High-level analog control: Turing patterns and autowaves; 8. Conclusions; Appendix A HexaDyn and CNNTLab: two tools for bio-inspired locomotion control; Appendix B Design of the CNN circuit; Appendix C A Chaos-based sensor for bio-inspired robots; References; Index
Sommario/riassunto	This book deals with locomotion control of biologically inspired robots realized through an analog circuit paradigm as cellular nonlinear networks. It presents a general methodology for the control of bio-inspired robots and several case studies, as well as describes a new approach to motion control and the related circuit architecture.