1. Record Nr. UNINA9910450133003321

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Titolo	Bio-inspired emergent control of locomotion systems [[electronic resource] /] / Mattia Frasca, Paolo Arena, Luigi Fortuna
Pubbl/distr/stampa	River Edge, N.J. ; ; London, : World Scientific, c2004
ISBN	1-281-34761-2 9786611347611 981-256-230-3
Descrizione fisica	1 online resource (211 p.)
Collana	World Scientific series on nonlinear science. Series A ; ; v. 48
Altri autori (Persone)	ArenaPaolo <1966-> FortunaL <1953-> (Luigi)
Disciplina	629.8932
Soggetti	Robotics Mobile robots Neural networks (Computer science) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
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 CNNLab: 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 circuital 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.