

1. Record Nr.	UNINA9910808202603321
Autore	Yalcin Mustak E
Titolo	Cellular neural networks, multi-scroll chaos and synchronization // Mustak E. Yalcin, Johan A.K. Suykens, Joos P.L. Vandewalle
Pubbl/distr/stampa	New Jersey ; ; London, : World Scientific, c2005
ISBN	1-281-34786-8 9786611347864 981-256-774-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (247 p.)
Collana	World Scientific series on nonlinear science. Series A, Monographs and treatises ; ; 50
Altri autori (Persone)	SuykensJohan A. K VandewalleJ <1948-> (Joos)
Disciplina	006.32
Soggetti	Neural networks (Computer science) Nonlinear systems Chaotic behavior in systems Synchronization Computer engineering
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	Preface; Contents; Chapter 1 Introduction; Chapter 2 Cellular Neural/Nonlinear Networks; Chapter 3 Multi-Scroll Chaotic and Hyperchaotic Attractors; Chapter 4 Synchronization of Chaotic Lur'e Systems; Chapter 5 Engineering Applications; Chapter 6 General Conclusions and Future Work; Bibliography; Notation; Index
Sommario/riassunto	For engineering applications that are based on nonlinear phenomena, novel information processing systems require new methodologies and design principles. This perspective is the basis of the three cornerstones of this book: cellular neural networks, chaos and synchronization. Cellular neural networks and their universal machine implementations offer a well-established platform for processing spatial-temporal patterns and wave computing. Multi-scroll circuits are generalizations to the original Chua's circuit, leading to chip implementable circuits with increasingly complex attractors. Several

