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	Titolo	Elegant chaos [[electronic resource]] : algebraically simple chaotic flows / / Julien Clinton Sprott
	Pubbl/distr/stampa	New Jersey, : World Scientific, c2010
	ISBN	1-282-75766-0
		9786612757662
		981-283-882-1
	Descrizione fisica	1 online resource (304 p.)
	Disciplina	515/.35
	Soggetti	Lyapunov exponents
		Flows (Differentiable dynamical systems)
		Chaotic behavior in systems - Mathematics
	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 (p. 265-280) and index.
	Nota di contenuto	Preface; Contents; List of Tables; 1. Fundamentals; 2. Periodically Forced Systems; 3. Autonomous Dissipative Systems; 4. Autonomous Conservative Systems; 5. Low-dimensional Systems (D 3); 7. Circulant Systems; 8. Spatiotemporal Systems; 9. Time-Delay Systems; 10. Chaotic Electrical Circuits; Bibliography; Index
	Sommario/riassunto	This heavily illustrated book collects in one source most of the mathematically simple systems of differential equations whose solutions are chaotic. It includes the historically important systems of van der Pol, Duffing, Ueda, Lorenz, Rossler, and many others, but it goes on to show that there are many other systems that are simpler and more elegant. Many of these systems have been only recently discovered and are not widely known. Most cases include plots of the attractor and calculations of the spectra of Lyapunov exponents. Some important cases include graphs showing the route to chaos.The