1.	Record Nr.	UNISA996418447403316
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	Titolo	Bifurcation dynamics in polynomial discrete systems / / Albert C. J. Luo
	Pubbl/distr/stampa	Singapore : , : Springer, , [2020] ©2020
	ISBN	981-15-5208-8
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (XI, 430 p. 68 illus., 66 illus. in color.)
	Collana	Nonlinear physical science
	Disciplina	511.3
	Soggetti	Computational complexity Dynamics Ergodic theory
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Quadratic Nonlinear Discrete Systems -- Cubic Nonlinear Discrete Systems -- Quartic Nonlinear Discrete Systems -- (2m)th-degree Polynomial Discrete Systems -- (2m+1)th-degree polynomial discrete systems -- Subject index. .
	Sommario/riassunto	This is the first book focusing on bifurcation dynamics in 1-dimensional polynomial nonlinear discrete systems. It comprehensively discusses the general mathematical conditions of bifurcations in polynomial nonlinear discrete systems, as well as appearing and switching bifurcations for simple and higher-order singularity period-1 fixed-points in the 1-dimensional polynomial discrete systems. Further, it analyzes the bifurcation trees of period-1 to chaos generated by period-doubling, and monotonic saddle-node bifurcations. Lastly, the book presents methods for period-2 and period-doubling renormalization for polynomial discrete systems, and describes the appearing mechanism and period-doublization of period-n fixed-points on bifurcation trees for the first time, offering readers fascinating insights into recent research results in nonlinear discrete systems.