Record Nr. UNINA9910299468703321 Autore Gertsbakh Ilya **Titolo** Ternary Networks: Reliability and Monte Carlo / / by Ilya Gertsbakh, Yoseph Shpungin, Radislav Vaisman Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 **ISBN** 3-319-06440-1 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (73 p.) Collana SpringerBriefs in Electrical and Computer Engineering, , 2191-8112 621.3015135 Disciplina Soggetti Electrical engineering Computer software—Reusability Computer organization Quality control Reliability Industrial safety Communications Engineering, Networks Performance and Reliability Computer Systems Organization and Communication Networks Quality Control, Reliability, Safety and Risk 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 The principal Model ternary spectrum -- Importance spectrum --Example of Network: weak and strong connectivity -- Components ranking by their importance; example.-Extension of basic model to many-state system -- Example of Network flow network -- Network with unreliable ternary nodes -- Evolution method: extension to ternary system -- Series and parallel connection of ternary networks -- Large Networks with colored nodes; supply networks -- Network interaction: binary networks -- Network interaction: ternary networks. Sommario/riassunto Ternary means "based on three". This book deals with reliability investigations of networks whose components subject to failures can be in three states -up, down and middle (mid), contrary to traditionally considered networks having only binary (up/down) components.

Extending binary case to ternary allows to consider more realistic and

 flexible models for communication, flow and supply networks.	