Record Nr. UNINA9910350306703321 Autore Zheng Jeffrey Titolo Variant Construction from Theoretical Foundation to Applications // edited by Jeffrey Zheng Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-13-2282-1 Edizione [1st ed. 2019.] 1 online resource (XXIV, 409 p. 148 illus., 92 illus. in color.) Descrizione fisica Disciplina 621.3815 Soggetti Electronic circuits Logic design Computer science - Mathematics **Electronic Circuits and Systems** Logic Design Mathematical Applications in Computer Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Variant Logic -- Variant Measurement -- Variant Map -- Variation with Global Functions -- Variant Stream Ciphers --Quantum Interferences -- Classical/Quantum Cryptographic Sequences -- Whole DNA Sequences -- Multiple Valued Pulse Sequences --Conclusion -- Bibliography -- Index. Sommario/riassunto This open access book presents theoretical framework and sample applications of variant construction. The first part includes the components variant logic, variant measurements, and variant maps, while the second part covers sample applications such as variation with functions, variant stream ciphers, quantum interference, classical/quantum random sequences, whole DNA sequences, and multiple-valued pulse sequences. Addressing topics ranging from logic and measuring foundation to typical applications and including various illustrated maps, it is a valuable guide for theoretical researchers in discrete mathematics; computing-, quantum- and communication scientists; big data engineers; as well as graduate and upper

undergraduate students.