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Nota di contenuto	Introduction / Alvin W. Strong -- Dielectric characterization and reliability methodology / Ernest Y. Wu, Rolf-Peter Vollertsen, and Jordi Sune -- Dielectric breakdown of gate oxides: physics and experiments / Ernest Y. Wu, Rolf-Peter Vollertsen, and Jordi Sune -- Negative bias temperature instabilities in pMOSFET devices / Giuseppe LaRosa -- Hot carriers / Stewart E. Rauch, III -- Stress-induced voiding / Timothy D. Sullivan -- Electromigration / Timothy D. Sullivan.
Sommario/riassunto	A comprehensive treatment of all aspects of CMOS reliability wearout mechanisms This book covers everything students and professionals need to know about CMOS reliability wearout mechanisms, from basic concepts to the tools necessary to conduct reliability tests and analyze the results. It is the first book of its kind to bring together the pertinent physics, equations, and procedures for CMOS technology reliability in one place. Divided into six relatively independent topics, the book covers: Introduction to Reliability Gate Dielectric Reliability Negative Bias