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Nota di contenuto	Front Cover; Contents; Preface; About the Authors; List of Abbreviations; List of Symbols; Chapter 1 - Introduction; Chapter 2 - Substrate-Induced Strain Engineering in CMOS Technology; Chapter 3 - Process-Induced Stress Engineering in CMOS Technology; Chapter 4 - Electronic Properties of Strain-Engineered Semiconductors; Chapter 5 - Strain-Engineered MOSFETs; Chapter 6 - Noise in Strain-Engineered Devices; Chapter 7 - Technology CAD of Strain-Engineered MOSFETs; Chapter 8 - Reliability and Degradation of Strain-Engineered MOSFETs Chapter 9 - Process Compact Modelling of Strain-Engineered MOSFETsChapter 10 - Process-Aware Design of Strain-Engineered MOSFETs; Chapter 11 - Conclusions; Back Cover
Sommario/riassunto	Currently strain engineering is the main technique used to enhance the performance of advanced silicon-based metal-oxide-semiconductor field-effect transistors (MOSFETs). Written from an engineering application standpoint, Strain-Engineered MOSFETs introduces promising strain techniques to fabricate strain-engineered MOSFETs and to methods to assess the applications of these techniques. The book provides the background and physical insight needed to understand new and future developments in the modeling and design of n- and p-MOSFETs at nanoscale. This book fo

