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Sommario/riassunto

This book describes up-to-date technology applied to high-K materials for More Than Moore applications, i.e. microsystems applied to microelectronics core technologies.After detailing the basic thermodynamic theory applied to high-K dielectrics thin films including extrinsic effects, this book emphasizes the specificity of thin films. Deposition and patterning technologies are then presented. A whole chapter is dedicated to the major role played in the field by X-Ray Diffraction characterization, and other characterization techniques are also described such as Radio frequency characterizat