DESCRIPTION

A state-of-the-art overview of high-k dielectric materials for advanced field-effect transistors, from both a fundamental and a technological viewpoint, summarizing the latest research results and development solutions. As such, the book clearly discusses the advantages of these materials over conventional materials and also addresses the issues that accompany their integration into existing production technologies.

Aimed at academia and industry alike, this monograph combines introductory parts for newcomers to the field as well as advanced sections with directly applicable solutions for experienced researchers and developers in materials science, physics and electrical engineering.

ABOUT THE AUTHOR

Gang He is Professor at the School of Physics and Materials Science of the Anhui University, China. He obtained his academic degrees from the Institute of Solid State Physics of the Chinese Academy of Sciences. His research interests and efforts cover the areas of the preparation, characterization, fundamental understanding and associated applications of high-k gate dielectric thin
films. Due to his outstanding performance in research work, he won a scholarship award from the Chinese Academy of Sciences in 2005 and a grant of the Japanese Society for the Promotion of Science in 2006.

Zhaoqi Sun is the President of the School of Physics and Materials Science at the Anhui University. He graduated from Sichuan University and obtained his academic degrees from the University of Science and Technology of China. His research is focused on functional thin film materials for applications in microelectronics. Zhaoqi Sun has authored more than 140 scientific publications and has received numerous scientific awards, including the Science and Technology Award of the Anhui Province and an Outstanding Teacher Award.

For additional product details, please visit https://www.wiley.com/en-us