Future Trends in Microelectronics: From Nanophotonics to Sensors to Energy
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DESCRIPTION

In the summer of 2009, leading professionals from industry, government, and academia gathered for a free-spirited debate on the future trends of microelectronics. This volume represents the summary of their valuable contributions. Providing a cohesive exploration and holistic vision of semiconductor microelectronics, this text answers such questions as: What is the future beyond shrinking silicon devices and the field-effect transistor principle? Are there green pastures beyond the traditional semiconductor technologies? This resource also identifies the direction the field is taking, enabling microelectronics professionals and students to conduct research in an informed, profitable, and forward-looking fashion.

ABOUT THE AUTHOR

Dr. Serge Luryi is a Distinguished Professor and Chair of Electrical and Computer Engineering at the State University of New York at Stony Brook. Since 1998, Dr. Luryi has been Director of the New York State Center for Advanced Technology in Sensor Systems. He has published over 200 papers and has been awarded forty-seven U.S. patents.

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Dr. Alex Zaslavsky is Professor of Engineering and Physics at Brown University. He has published over eighty journal articles and book chapters, and coedited six books in the microelectronics field. Since 2003, he has been an editor of *Solid-State Electronics: An International Journal*.