

Process Integration Challenges

Instructor: Bruce Doris, IBM Corporation

- Integration Challenges for 5nm Node FinFET
- SRAM area scaling
- Alternate Channel Materials
- Horizontal and Vertical Nanowires

Bruce Doris is currently in the Exploratory Device Group at IBM. He has worked on advanced device architectures including FDSOI, FinFETs. In 2007 he established the Device Integration Group at the Albany Nano Technology Center. Bruce was instrumental in driving UTBB/FDSOI from the initial research phase into the development and production phase. He went on to create the Pathfinding Alliance at IBM to deliver performance elements and advanced device options for IBM and their alliance partners. He has authored or co-authored over 100 papers and holds well over 350 US patents. Today Bruce's research interests include radiation effects in advanced devices, alternate channel materials for FDSOI and FinFETs and new devices architectures for beyond the 7nm node.