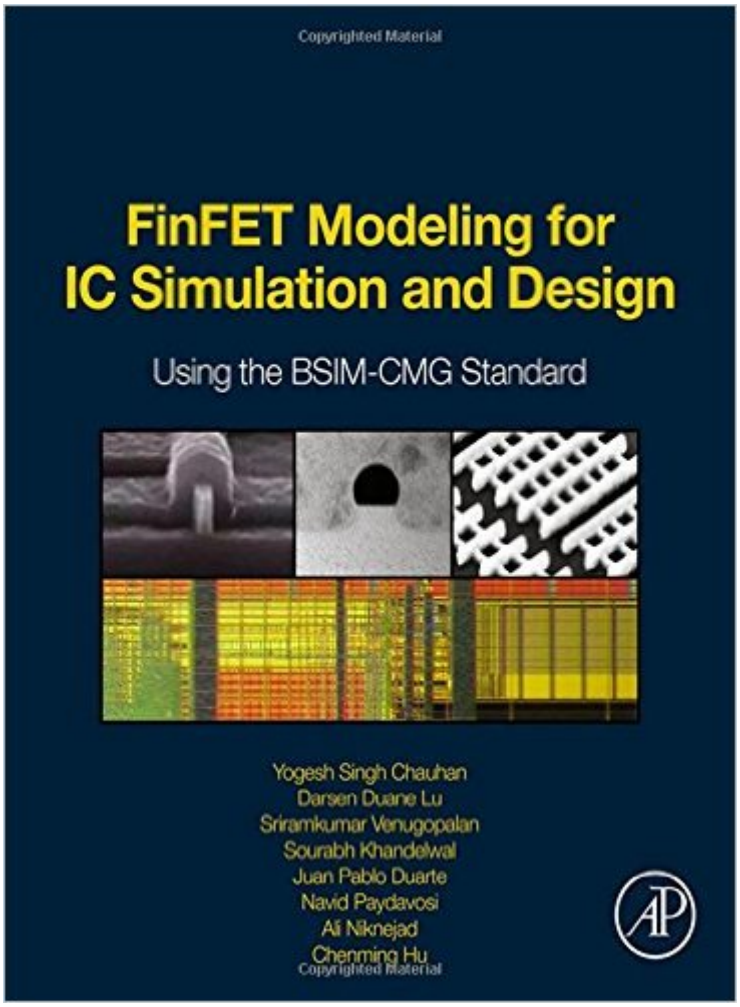
FinFET Modeling For IC Simulation And Design: Using The BSIM-CMG Standard



Synopsis

This book is the first to explain FinFET modeling for IC simulation and the industry standard â “ BSIM-CMG - describing the rush in demand for advancing the technology from planar to 3D architecture, as now enabled by the approved industry standard. The book gives a strong foundation on the physics and operation of FinFET, details aspects of the BSIM-CMG model such as surface potential, charge and current calculations, and includes a dedicated chapter on parameter extraction procedures, providing a step-by-step approach for the efficient extraction of model parameters. With this book you will learn: Why you should use FinFETThe physics and operation of FinFETDetails of the FinFET standard model (BSIM-CMG)Parameter extraction in BSIM-CMGFinFET circuit design and simulation Authored by the lead inventor and developer of FinFET, and developers of the BSIM-CM standard model, providing an expertsâ ™ insight into the specifications of the standardThe first book on the industry-standard FinFET model - BSIM-CMG

Book Information

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Customer Reviews

Really nice book, one of the very few I would recommend.It is written by original authors of the model and is NOT just copy-and-paste from Berkeley’s manual.Another one, and no less valuable asset, is on level=54 (planar MOSFET), by (notice same Prof. Hu)Weidong Liu and Chenming Hu, BSIM4 and MOSFET modeling for IC simulation, World Scientific, 2011Actually, these 2 books are complimentary, since the FinFET’s BSIM-CMG is based upon the BSIM4 which is explained in detail

by Weidong and Prof. Hu in the latter book.

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