1. Record Nr. UNINA9910554835903321

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Titolo	Junctionless Field-Effect Transistors : Design, Modeling, and Simulation / / Shubham Sahay, Mamidala Jagadesh Kumar
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons Inc., , [2019] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2019]
ISBN	1-119-52352-4 1-119-52354-0 1-119-52351-6
Descrizione fisica	1 online resource
Collana	IEEE Press series on microelectronic systems
Disciplina	621.3815/284
Soggetti	Metal semiconductor field-effect transistors
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface xi -- 1 Introduction to Field-Effect Transistors 1 -- 1.1 Transistor Action 2 -- 1.2 Metal-Oxide-Semiconductor Field-Effect Transistors 4 -- 1.3 MOSFET Circuits: The Need for Complementary MOS 9 -- 1.4 The Need for CMOS Scaling 11 -- 1.5 Moore’s Law 13 -- 1.6 Koomey’s Law 13 -- 1.7 Challenges in Scaling the MOSFET 13 -- 1.8 Conclusion 23 -- References 23 -- 2 Emerging FET Architectures 27 -- 2.1 Tunnel FETs 28 -- 2.2 Impact Ionization MOSFET 34 -- 2.3 Bipolar I-MOS 39 -- 2.4 Negative Capacitance FETs 41 -- 2.5 Two-Dimensional FETs 46 -- 2.6 Nanowire FETs 49 -- 2.7 Nanotube FETs 51 -- 2.8 Conclusion 57 -- References 58 -- 3 Fundamentals of Junctionless Field-Effect Transistors 67 -- 3.1 Device Structure 69 -- 3.2 Operation 70 -- 3.3 Design Parameters 80 -- 3.4 Parameters that Affect the Performance 82 -- 3.5 Beyond Silicon JLFETS: Other Materials 100 -- 3.6 Challenges 103 -- 3.7 Conclusion 110 -- References 111 -- 4 Device Architectures to Mitigate Challenges in Junctionless Field-Effect Transistors 125 -- 4.1 Junctionless Accumulation-Mode Field-Effect Transistors 126 -- 4.2 Realizing Efficient Volume Depletion 129 -- 4.3 SOI JLFET with a High-𝜅 Box 131 -- 4.4 Bulk Planar JLFET 137 -- 4.5 JLFET with a Nonuniform Doping 140 -- 4.6 JLFET with a Step Doping Profile 144 -- 4.7 Multigate JLFET 149 -- 4.8 JLFET with a High-𝜅 Spacer

Sommario/riassunto

A comprehensive one-volume reference on current JLFET methods, techniques, and research Advancements in transistor technology have driven the modern smart-device revolution-many cell phones, watches, home appliances, and numerous other devices of everyday usage now surpass the performance of the room-filling supercomputers of the past. Electronic devices are continuing to become more mobile, powerful, and versatile in this era of internet-of-things (IoT) due in large part to the scaling of metal-oxide semiconductor field-effect transistors (MOSFETs). Incessant scaling of the conventional MOSFETs to cater to consumer needs without incurring performance degradation requires costly and complex fabrication process owing to the presence of metallurgical junctions. Unlike conventional MOSFETs, junctionless field-effect transistors (JLFETs) contain no metallurgical junctions, so they are simpler to process and less costly to manufacture.JLFETs utilize a gated semiconductor film to control its resistance and the

current flowing through it. Junctionless Field-Effect Transistors: Design, Modeling, and Simulation is an inclusive, one-stop reference on the study and research on JLFETs This timely book covers the fundamental physics underlying JLFET operation, emerging architectures, modeling and simulation methods, comparative analyses of JLFET performance metrics, and several other interesting facts related to JLFETs. A calibrated simulation framework, including guidance on SentaurusTCAD software, enables researchers to investigate JLFETs, develop new architectures, and improve performance. This valuable resource: -Addresses the design and architecture challenges faced by JLFET as a replacement for MOSFET -Examines various approaches for analytical and compact modeling of JLFETs in circuit design and simulation -Explains how to use Technology Computer-Aided Design software (TCAD) to produce numerical simulations of JLFETs -Suggests research directions and potential applications of JLFETs Junctionless Field-Effect Transistors: Design, Modeling, and Simulation is an essential resource for CMOS device design researchers and advanced students in the field of physics and semiconductor devices.

2. Record Nr. UNINA9910520107203321

Autore	Yang Fenggang
Titolo	Atlas of religion in China : social and geographical contexts / / by Fenggang Yang ; with assistance from J.E.E. Pettit
Pubbl/distr/stampa	Brill, 2018 Leiden, ; Boston : , : Brill, , 2018
ISBN	90-04-36990-2
Descrizione fisica	1 online resource (259 pages)
Altri autori (Persone)	PettitJ. E. E
Disciplina	299.51
Soggetti	Religion: general China Religion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Sommario/riassunto	The speed and the scale with which traditional religions in China have been revived and new spiritual movements have emerged in recent decades make it difficult for scholars to stay up-to-date on the religious transformations within Chinese society. This unique atlas presents a bird’s-eye view of the religious landscape in China today. In more than 150 full-color maps and six different case studies, it maps the officially registered venues of China’s major religions - Buddhism, Christianity (Protestant and Catholic), Daoism, and Islam - at the national, provincial, and county levels. The atlas also outlines the contours of Confucianism, folk religion, and the Mao cult. Further, it describes the main organizations, beliefs, and rituals of China’s main religions, as well as the social and demographic characteristics of their respective believers. Putting multiple religions side by side in their contexts, this atlas deploys the latest qualitative, quantitative and spatial data acquired from censuses, surveys, and fieldwork to offer a definitive overview of religion in contemporary China. An essential resource for all scholars and students of religion and society in China.

3.

Record Nr.	UNIORUON00077011
Autore	CLARK, J. Desmond
Titolo	The prehistory of Africa / J. Desmond Clark
Pubbl/distr/stampa	London, : Thames and Hudson, 1970
ISBN	05-00-02069-8
Descrizione fisica	302 p., c. e p. di tav., : ill. ; 21 cm
Disciplina	960.1
Soggetti	PREISTORIA - Africa
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia