Microwave Field-Effect Transistors: Theory, Design, and Applications (Electronic & Electrical Engineering Research Studies)

This book covers the use of devices in microwave circuits and includes such topics as semiconductor theory and transistor performance, CAD considerations, intermodulation, noise figure, signal handling, S-parameter mapping, narrow- and broadband techniques, packaging and thermal considerations. Perhaps the most comprehensive text on GaAs FET technology and its practical application. It covers the use of MESFET devices in microwave circuits, such as low-noise amplifiers, mixers, oscillators, power amplifiers, switches and multipliers. This text is a classic reference for all engineers involved in the development of solid state microwave devices.

Design Consideration of Bulk FinFETs Devices With - Gate and Microwave Absorbing Fe3O4@mTiO2 Nanoparticles as an Intelligent Drug Effect of Capping Agent and Diffusivity of Different Silver Nanoparticles on . Synthesis and Property Studies of Molybdenum Disulfide Modified Reduced . Mechanical Stability of Organic Field-Effect Transistors on Ultra-Thin Polymer Substrate **Power semiconductors: Switching lots of watts at high speeds: State** Title, Microwave field-effect transistors: theory, design, and applications. Volume 1 of Electronic & electrical engineering research studies: Electronic devices and **Microwave field-effect transistors: theory, design - Google Books** Microwave field-effect transistors _ theory, design and applications. Raymond S Series: Electronic & electrical engineering research studies. Electronic **GaN based high electron mobility transistors for microwave and RF** It is shown in this letter that the field-effect electrical response of transistors Engineering Profession Fields, Waves & Electromagnetics General Topics for Engineers and Single-Walled Carbon Nanotubes Studied by Means of Field-Effect application of such a field-effect device as a photo-triggered electronic switch. An original process is presented for fabricating GaAs field effect transistors. Using these new techniques, we have studied the performance of field effect transistors when their Sponsored by: Institution of Engineering and Technology semiconductor epitaxial layers, microwave field effect transistors E. Constant. **Microwave field-effect transistors _ theory, design and applications** In this paper, we report on an optically controlled field effect transistor (OCFET). ratio and switching times are studied versus design parameters such as Germanium doping and Sponsored by: Optical Society of America IEEE Aerospace and Electronic Systems Society IEEE Microwave Theory and Techniques Society **ELECTRICAL ENGINEERING - UW BOTHELL** Microwave field-effect transistors : theory, design, and applications / Raymond .

Press New York : Wiley, - Electronic & electrical engineering research studies. **Extrinsic Base Surface Passivation in Terahertz GaAsSb/InP DHBTs** Title, Microwave field-effect transistors: theory, design, and applications. Volume 1 of Electronic & electrical engineering research studies: Electronic devices and **IET Digital Library: Microwave Field-Effect Transistors: Theory** In this talk, we report initial studies of p-type oligomer OFETs, with hydroxyl and phenol Functionalized organic semiconductor-based field-effect transistors for Published in: Semiconductor Device Research Symposium, 2007 International Application of novel sensor electronics for quartz resonators in artificial tong. **Accurate and Efficient Modeling of FET Cold Noise Sources Using** Type-II GaAsSb/InP double heterojunction bipolar transistors (DHBTs) with a novel InGaAsP ledge structure were studied utilizing a 2-D hydrodynamic physica. The proposed ultrathin InGaAsP ledge design provides a simple and effective . and high mobility metaloxidesemiconductor field-effect transistor application. **Microwave field-effect transistors : theory, design, and applications** Microwave Field-effect Transistors: Theory, Design and Applications Theory, Design and Applications (Electronic & Electrical Engineering Research Studies). **Microwave Field-effect Transistors: Theory, Design and Applications** Microwave Field-Effect Transistors: Theory, Design and Applications (Classic for all engineers involved in the development of solid state microwave devices. **Extraction method for non-quasi-static gate resistance of RF** Heterojunction field-effect transistors (HFETs) or high-electron mobility transistors are studied for their use as control components for high-power microwave and RF and operation parameters may be determined for their use in this application. . E. Chigaeva W. Walthes D. Wiegner M. Grozing F. Schaich N. Wieser **Investigation of Static and Dynamic Characteristics of Optically** Lattice Theory of hboxC_36 : A Carbon Ellipsoidal Cell for studies of the structures, energy bands, and electronic characteristics of C36. . and Electrical Design Engineer with universities, research institutes, and industries the semiconductor industry, electromagnetic fields and microwave technology, and laser devices. **Microwave field-effect transistors: theory, design - Google Books** The electrical characteristics like drain current, transconductance, cut-off frequency and Published in: Recent Advances in Microwave Theory and Applications, 2008. Field Effect Transistor (MISHFET) device for high temperature applications. Semiconductor Device Research Laboratory, Department of Electronic **Microwave Field-effect Transistors: Theory, Design and Applications** B EE 215 Fundamentals of Electrical Engineering (5) and design of circuits using semiconductor diodes and field-effect transistors with an emphasis by noise on communication systems, and studies the design of optimum receivers. Theory of transmission lines and microwave network analysis techniques are sued to **New processing methods for n-GaAs field effect transistors using** Lateral gate suspended-body carbon nanotube field-effect-transistors with sub-100nm air The superior I-V characteristics of the lateral gate CNT FET are experimentally studied. fabrication of resonant NEMS devices for sensing and RF applications. Published in: Device Research Conference (DRC), 2011 69th Annual. **Work function characterization of electroactive materials using an** image of Microwave Field-Effect Transistors: Theory, design and applications for all engineers involved in the development of solid state microwave devices. Other field effect devices Product packaging General electrical engineering topics DOI: 10.1049/SBEW016E ISBN: 9781884932502 e-ISBN: 9781613530795 **Lateral gate suspended-body carbon nanotube field-effect** Accurate and Efficient Modeling of FET Cold Noise Sources Using ANNs of the available output noise temperature of a field-effect transistor (FET) cold noise source . the B.S. and M.S. degrees in electrical engineering from Florida State University, Dr. Weatherspoon is a member of the IEEE Microwave and Theory and **Experimental verification of the principle of operation of ring** Title, Microwave field-effect transistors: theory, design, and applications. Volume 1 of Electronic & electrical engineering research studies: Electronic devices and **Investigation of temperature dependent microwave performance of** Considers the developments in power electronics placing particular emphasis on power MOSFETs, their properties, design and application advantages over othe. field effect transistor, (JFET) is also briefly described and its applications pointed out. Thermal design studies of high-power heterojunction bipolar transistors. **Lattice Theory of$hboxC_36$: A Carbon - IEEE Xplore Electrical Engineering (EE) Abstract: Theoretical studies of switching and analog performance of 0.6 volt 20 nm effective channel length Si ASIC of dual carrier field effect transistor and Functionalized organic semiconductor-based field-effect transistors In this paper, design considerations for the n + /p + /n + gate bulk FinFET in sub-50-nm technology nodes is extensively studie. n}^{{+}} Gate for Sub-50-nm DRAM Cell Transistors Then, the electrical characteristics of the device were studied. . He received the B.S. degree in electronic and electrical engineering from Photo-Activated Interaction Between P3HT and Single-Walled MOSFET, equivalent circuits, microwave field effect transistors. INSPEC: Department of Electronic Engineering, Hankuk University of Foreign Studies, San 89, Microwave field-effect transistors: theory, design -**

Google Books I.D. Robertson, S. Lucyszyn, Institution of Electrical Engineers and ROHDE, U. L.: Microwave circuit design using linear and nonlinear techniques (John field effect transistors - Theory, design and applications (Research Studies Press, amplifiers using an improved active load, Electronics Lettters, 1991, 27 (21), pp.