

Journal of Semiconductors

Volume 32 Number 5 May 2011

SEMICONDUCTOR PHYSICS

- 052001** First-principles study on transport properties of zigzag graphene nanoribbon with different spin-configurations (*6 pages*)
An Liping and Liu Nianhua
- 052002** Annealing optimization of hydrogenated amorphous silicon suboxide film for solar cell application (*3 pages*)
Jia Guangzhi, Liu Honggang, and Chang Hudong

SEMICONDUCTOR MATERIALS

- 053001** Physical properties of sprayed antimony doped tin oxide thin films: The role of thickness (*8 pages*)
A. R. Babar, S. S. Shinde, A. V. Moholkar, C. H. Bhosale, J. H. Kim, and K. Y. Rajpure
- 053002** Effects of vacancy structural defects on the thermal conductivity of silicon thin films (*4 pages*)
Zhang Xingli and Sun Zhaowei
- 053003** Growth of pure zinc blende p-type GaAs nanowires by metal-organic chemical vapor deposition (*6 pages*)
Li Ran, Huang Hui, Ren Xiaomin, Guo Jingwei, Liu Xiaolong, Huang Yongqing, and Cai Shiwei
- 053004** Characteristics of CdTe nanocrystals synthesized by a Na₂TeO₃ source (*4 pages*)
Wang Meiping, Fu Kai, and Lin Jinhui
- 053005** Material properties and effective work function of reactive sputtered TaN gate electrodes (*4 pages*)
Zhang Manhong, Huo Zongliang, Wang Qin, and Liu Ming

SEMICONDUCTOR DEVICES

- 054001** SPICE compatible analytical electron mobility model for biaxial strained-Si-MOSFETs (*6 pages*)
Amit Chaudhry, J. N. Roy, and S. Sangwan
- 054002** Characterization analysis of UDSM LVTSCR under TLP stress (*6 pages*)
Li Li, Liu Hongxia, Dong Cui, and Zhou Wen
- 054003** An analytical model for the surface electrical field distribution of LDMOSFETs with shield rings (*4 pages*)
Chen Lei and Du Huan
- 054004** PDSOI DTMOS for analog and RF application (*5 pages*)
Wang Yiqi, Liu Mengxin, Bi Jinshun, and Han Zhengsheng
- 054005** A physical-based pMOSFETs threshold voltage model including the STI stress effect (*5 pages*)
Wu Wei, Du Gang, Liu Xiaoyan, Sun Lei, Kang Jinfeng, and Han Ruqi
- 054006** A highly linear fully integrated CMOS power amplifier with an analog predistortion technique (*4 pages*)
Jin Boshi, Li Lewei, Wu Qun, Yang Guohui, and Zhang Kuang
- 054007** A high-power tapered and cascaded active multimode interferometer semiconductor laser diode (*4 pages*)
Lai Weijiang, Cheng Yuanbing, Yao Chen, Zhou Daibing, Bian Jing, Zhao Lingjuan, and Wu Jian
- 054008** Novel closed-form resistance formulae for rectangular interconnects (*6 pages*)
Chen Baojun, Tang Zhen'an, and Yu Tiejun

(Continued on inside back cover)

SEMICONDUCTOR INTEGRATED CIRCUITS

- 055001** **Design and implementation of an IEEE 802.11 baseband OFDM transceiver in 0.18 μm CMOS (5 pages)**
Wu Bin, Zhou Yumei, Zhu Yongxu, Zhang Zhengdong, and Cai Jingjing
- 055002** **A CMOS G_m-C complex filter with on-chip automatic tuning for wireless sensor network application (6 pages)**
Wan Chuanchuan, Li Zhiqun, and Hou Ningbing
- 055003** **A micromachined inline type microwave power sensor with working state transfer switches (5 pages)**
Han Lei
- 055004** **A dual-mode 6–9 GHz transmitter for OFDM-UWB (7 pages)**
Chen Yunfeng, Gao Ting, Li Wei, Li Ning, and Ren Junyan
- 055005** **A fully monolithic 0.18 μm SiGe BiCMOS power amplifier design (5 pages)**
Chen Lei, Ruan Ying, Su Jie, Zhang Shulin, Shi Chunqi, and Lai Zongsheng
- 055006** **Analysis and design of a 1.8–2.7 GHz tunable 8-band TDD LTE receiver front-end (7 pages)**
Wang Xiao, Wang Yuji, Wang Weiwei, Chang Xuegui, Yan Na, Tan Xi, and Min Hao
- 055007** **High-precision high-sensitivity clock recovery circuit for a mobile payment application (6 pages)**
Sun Lichong, Ren Wenliang, Yan Na, and Min Hao
- 055008** **A software solution to estimate the SEU-induced soft error rate for systems implemented on SRAM-based FPGAs (7 pages)**
Wang Zhongming, Yao Zhibin, Guo Hongxia, and Lü Min
- 055009** **Design of a passive UHF RFID tag for the ISO18000-6C protocol (6 pages)**
Wang Yao, Wen Guangjun, Mao Wei, He Yanli, and Zhu Xueyong
- 055010** **Effects of pattern characteristics on the copper electroplating process (4 pages)**
Ruan Wenbiao, Chen Lan, Li Zhigang, Ye Tianchun, Ma Tianyu, and Wang Qiang
- 055011** **Finite element simulation of hydrostatic stress in copper interconnects (6 pages)**
Yuan Guangjie and Chen Leng
- 055012** **A new FPGA architecture suitable for DSP applications (6 pages)**
Wang Liyun, Lai Jinmei, Tong Jiarong, Tang Pushan, Chen Xing, Duan Xueyan, Chen Liguang, Wang Jian, and Wang Yuan

SEMICONDUCTOR TECHNOLOGY

- 056001** **Cleaning method of InSb [1̄1̄1] B of n-InSb [111] A/B for the growth of epitaxial layers by liquid phase epitaxy (3 pages)**
Gh. Sareminia, F. Zahedi, Sh. Eminov, and Ar. Karamian
- 056002** **Optical and electrical properties of porous silicon layer formed on the textured surface by electrochemical etching (4 pages)**
Ou Weiyi, Zhao Lei, Diao Hongwei, Zhang Jun, and Wang Wenjing