

Journal of Semiconductors

Volume 33 Number 6 June 2012

SEMICONDUCTOR PHYSICS

- 062001** **Stacking fault energy in some single crystals** (*5 pages*)
Aditya M. Vora

SEMICONDUCTOR MATERIALS

- 063001** **Simultaneous quality improvement of the roughness and refractive index of SiC thin films** (*4 pages*)
Gh. Sareminia, H. Simchi, A. Ostovari, and L. Lavasanpour
- 063002** **Tungsten oxide nanostructures: controllable growth and field emission** (*4 pages*)
Yue Shuanglin, Xu Tingting, Li Wei, Yan Ji, and Yi He

SEMICONDUCTOR DEVICES

- 064001** **The design of electroabsorption modulators with negative chirp and very low insertion loss** (*6 pages*)
Kambiz Abedi
- 064002** **A 150% enhancement of PMOSFET mobility using hybrid orientation** (*4 pages*)
Tang Zhaohuan, Tan Kaizhou, Cui Wei, Zhang Jing, Zhong Yi, Xu Shiliu, Hao Yue, Zhang Heming, Hu Huiyong, Zhang Zhengfan, and Hu Gangyi
- 064003** **Hot-carrier reliability in OPTVLD-LDMOS** (*4 pages*)
Cheng Junji and Chen Xingbi
- 064004** **Enhancement-mode InAlN/GaN MISHEMT with low gate leakage current** (*3 pages*)
Gu Guodong, Cai Yong, Feng Zhihong, Liu Bo, Zeng Chunhong, Yu Guohao, Dong Zhihua, and Zhang Baoshun
- 064005** **Analysis of the ohmic contacts of Ti/Al/Ni/Au to AlGaIn/GaN HEMTs by the multi-step annealing process** (*6 pages*)
Yan Wei, Zhang Renping, Du Yandong, Han Weihua, and Yang Fuhua
- 064006** **Study of radiation-induced leakage current between adjacent devices in a CMOS integrated circuit** (*6 pages*)
Ding Lili, Guo Hongxia, Chen Wei, and Fan Ruyi
- 064007** **Characterization of the nanosized porous structure of black Si solar cells fabricated via a screen printing process** (*4 pages*)
Tang Yehua, Zhou Chunlan, Wang Wenjing, Zhou Su, Zhao Yan, Zhao Lei, Li Hailing, Yan Baojun, Chen Jingwei, Fei Jianming, and Cao Hongbin
- 064008** **Far-infrared electroluminescence characteristics of an InGaP/InGaAs/Ge triple-junction solar cell under forward DC bias** (*4 pages*)
Xiao Wenbo, He Xingdao, Gao Yiqing, Zhang Zhimin, and Liu Jiangtao
- ## SEMICONDUCTOR INTEGRATED CIRCUITS
- 065001** **A 2.5 mW 370 mV/pF high linearity stray-immune symmetrical readout circuit for capacitive sensors** (*5 pages*)
Zhou Kaimin, Wang Ziqiang, Zhang Chun, and Wang Zhihua

(Continued on inside back cover)

- 065002** **A novel circuit architecture for fourth subharmonic mixers** (5 pages)
Yao Changfei, Xu Conghai, Zhou Ming, and Luo Yunsheng
- 065003** **A 6th order wideband active-RC LPF for LTE application** (6 pages)
Wei Baoyue, Li Hongkun, Wang Yunfeng, and Zhang Haiying
- 065004** **Low-power digital ASIC for on-chip spectral analysis of low-frequency physiological signals** (4 pages)
Nie Zedong, Zhang Fengjuan, Li Jie, and Wang Lei
- 065005** **Adaptive IF selection and IQ mismatch compensation in a low-IF GSM receiver** (8 pages)
Zhang Cheng, Wang Lifang, Tan Xi, and Min Hao
- 065006** **High voltage generator circuit with low power and high efficiency applied in EEPROM** (5 pages)
Liu Yan, Zhang Shilin, and Zhao Yiqiang
- 065007** **A fast combination calibration of foreground and background for pipelined ADCs** (11 pages)
Sun Kexu and He Lenian
- 065008** **A 200 mV low leakage current subthreshold SRAM bitcell in a 130 nm CMOS process** (6 pages)
Bai Na and Lü Baitao
- 065009** **An AES chip with DPA resistance using hardware-based random order execution** (8 pages)
Yu Bo, Li Xiangyu, Chen Cong, Sun Yihe, Wu Liji, and Zhang Xiangmin
- 065010** **Analysis and modeling of on-chip transformers under two ground conditions** (5 pages)
Wei Jiaju, Wang Zhigong, Li Zhiqun, and Tang Lu

SEMICONDUCTOR TECHNOLOGY

- 066001** **Anodic bonding using a hybrid electrode with a two-step bonding process** (4 pages)
Luo Wei, Xie Jing, Zhang Yang, Li Chaobo, and Xia Yang
- 066002** **Statistical key variable analysis and model-based control for improvement performance in a deep reactive ion etching process** (7 pages)
Chen Shan, Pan Tianhong, Li Zhengming, and Jang Shi-Shang
- 066003** **H-plasma-assisted aluminum induced crystallization of amorphous silicon** (4 pages)
Li Juan, Liu Ning, Luo Chong, Meng Zhiguo, Xiong Shaozhen, and Hoi Sing Kwok
- 066004** **Rapid thermal annealing effects on vacuum evaporated ITO for InGaN/GaN blue LEDs** (4 pages)
Ding Yan, Guo Weiling, Zhu Yanxu, Liu Jianpeng, and Yan Weiwei