Journal of Semiconductors

Volume 33 Number 6 June 2012

SEMI	CON	DUCTOR	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 AlGaN/GaN HEMTs by the multi-step annealing process (6 pages)

Yan Wei, Zhang Renping, Du Yandong, Han Weihua, and Yang Fuhua

8 Study of radiation-induced leakage current between adjacent devices in a CMOS integrated circuit (6 pages)

Ding Lili, Guo Hongxia, Chen Wei, and Fan Ruyu

Ocharacterization 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

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			