

# Journal of Semiconductors



Volume 37 Number 12 December 2016

## SEMICONDUCTOR PHYSICS

- 122001** **Electrical properties of  $\text{Cu}_4\text{ZnSnS}_2/\text{ZnS}$  heterojunction prepared by ultrasonic spray pyrolysis** (4 pages)  
S. Guitouni, M. Khammar, M. Messaoudi, N. Attaf, and M. S. Aida
- 122002** **Effect of ultrasound on reverse leakage current of silicon Schottky barrier structure** (7 pages)  
O. Ya Olikh, K. V. Voitenko, R. M. Burbelo, and Ja M. Olikh
- 122003** **The slabs for the rutile  $\text{TiO}_2$  (110) surface** (7 pages)  
Li Xuechao, Shi Jianhao, and Wan Rundong

## SEMICONDUCTOR MATERIALS

- 123001** **Influence of thickness on strain state and surface morphology of AlN grown by HVPE** (4 pages)  
Sun Maosong, Zhang Jicai, Huang Jun, Li Xuewei, Wang Linjun, Liu Xuehua, Wang Jianfeng, and Xu Ke
- 123002** **Nanoplasmonic-gold-cylinder-array-enhanced terahertz source** (6 pages)  
Ao Zhiguang, Sun Jinhai, Cai He, Song Guofeng, Song Jiakun, Song Yuzhi, and Xu Yun

## SEMICONDUCTOR DEVICES

- 124001** **Research progress of III–V laser bonding to Si** (12 pages)  
Ren Bo, Hou Yan, and Liang Yanan
- 124002** **Optimization design on breakdown voltage of AlGaIn/GaN high-electron mobility transistor** (5 pages)  
Liu Yang, Chai Changchun, Shi Chunlei, Fan Qingyang, and Liu Yuqian
- 124003** **Total ionizing dose radiation effects on NMOS parasitic transistors in advanced bulk CMOS technology devices** (6 pages)  
He Baoping, Wang Zujun, Sheng Jiangkun, and Huang Shaoyan
- 124004** **Analysis of mode characteristics for microcircular resonators confined by different metallic materials** (8 pages)  
Yao Qifeng, Huang Yongzhen, Yang Yuede, and Xiao Jinlong
- 124005** **C-band fundamental/first-order mode converter based on multimode interference coupler on InP substrate** (5 pages)  
Zhang Limeng, Lu Dan, Li Zhaosong, Pan Biwei and Zhao Ling juan

## SEMICONDUCTOR INTEGRATED CIRCUITS

- 125001** **Efficient SRAM yield optimization with mixture surrogate modeling** (6 pages)  
Jiang Zhongjian, Ye Zuochang, and Wang Yan
- 125002** **Design of replica bit line control circuit to optimize power for SRAM** (6 pages)  
Wang Pengjun, Zhou Keji, Zhang Huihong, and Gong Daohui
- 129501** **Annual List of Contents to Volume 37** (14 pages)
- 129901** **Author Index to Volume 37** (16 pages)