

■ SEMICONDUCTOR MATERIALS

- 033001 **Synthesis and characterization of ZnO–CuO nanocomposites powder by modified perfume spray pyrolysis method and its antimicrobial investigation**
[7 pages] D. Saravanakumar, S. Sivaranjani, K. Kaviyarasu, A. Ayeshamariam, B. Ravikumar, S. Pandiarajan, C. Veeralakshmi, M. Jayachandran, and M. Maaza
- 033002 **Gas selectivity of SILAR grown CdS nano-bulk junction**
[6 pages] R. Jayakrishnan, Varun G Nair, Akhil M Anand, and Meera Venugopal
- 033003 **Investigation on the InAs_{1-x}Sb_x epilayers growth on GaAs (001) substrate by molecular beam epitaxy**
[5 pages] D. Benyahia, Ł. Kubiszyn, K. Michalczewski, A. Kęłowski, P. Martyniuk, J. Piotrowski, and A. Rogalski
- 033004 **Studies on morphology, electrical and optical characteristics of Al-doped ZnO thin films grown by atomic layer deposition**
[6 pages] Li Chen, Xinliang Chen, Zhongxin Zhou, Sheng Guo, Ying Zhao, and Xiaodan Zhang
- 033005 **Efficient dye-sensitized solar cells from mesoporous zinc oxide nanostructures sensitized by N719 dye**
[6 pages] G. R. A. Kumara, U. Deshapriya, C. S. K. Ranasinghe, E. N. Jayaweera, and R. M. G. Rajapakse
- 033006 **Analysis of the growth of GaN epitaxy on silicon**
[3 pages] Danmei Zhao and Degang Zhao

■ SEMICONDUCTOR DEVICES

- 034001 **Room temperature continuous wave operation of quantum cascade laser at $\lambda \sim 9.4 \mu\text{m}$**
[4 pages] Chuncai Hou, Yue Zhao, Jinchuan Zhang, Shenqiang Zhai, Ning Zhuo, Junqi Liu, Lijun Wang, Shuman Liu, Fengqi Liu, and Zhanguo Wang
- 034002 **Investigation of internally finned LED heat sinks**
[6 pages] Bin Li, Lun Xiong, Chuan Lai, and Yumei Tang
- 034003 **Single-event burnout hardening of planar power MOSFET with partially widened trench source**
[6 pages] Jiang Lu, Hainan Liu, Xiaowu Cai, Jiajun Luo, Bo Li, Binhong Li, Lixin Wang, and Zhengsheng Han
- 034004 **Cadmium sulfide thin films growth by chemical bath deposition**
[7 pages] S. Hariech, M. S. Aida, J. Bougdira, M. Belmahi, G. Medjahdi, D. Genève, N. Attaf, and H. Rinnert
- 034005 **Fabrication of 4H-SiC n-channel IGBTs with ultra high blocking voltage**
[3 pages] Xiaolei Yang, Yonghong Tao, Tongtong Yang, Runhua Huang, and Bai Song

■ **SEMICONDUCTOR INTEGRATED CIRCUITS**

035001 **High speed true random number generator with a new structure of coarse-tuning PDL in FPGA**

[6 pages] Hongzhen Fang, Pengjun Wang, Xu Cheng, and Keji Zhou

035002 **An ultra-low power output capacitor-less low-dropout regulator with slew-rate-enhanced circuit**

[6 pages] Xin Cheng, Yu Zhang, Guangjun Xie, Yizhong Yang, and Zhang Zhang

035003 **Design and analysis of an energy-efficient O-QPSK coherent IR-UWB transceiver with a 0.52° RMS phase-noise fractional synthesizer**

[11 pages] Yutong Ying, Fujiang Lin, and Xuefei Bai