## Journal of Semiconductors

024004

characterization test setup (10 pages)

Wang Yelin

Volume 36 Number 2 February 2015

	SEMICONDUCTOR PHYSICS
022001	Monte-Carlo simulation studies of the effect of temperature and diameter variation on spin transport in II–VI semiconductor nanowires (5 pages)
022002	Sabiq Chishti, Bahniman Ghosh, and Bhupesh Bishnoi  Quantum pump effect in a four-terminal mesoscopic structure (4 pages)  Wang Kaikai
	SEMICONDUCTOR MATERIALS
023001	Oriented colloidal-crystal thin films of polystyrene spheres via spin coating (8 pages) S. S. Shinde and S. Park
023002	Synthesis of metal oxide composite nanosheets and their pressure sensing properties (6 pages) Muhammad Tariq Saeed Chani, Sher Bahadar Khan, Kh. S. Karimov, M. Abid, Abdullah M. Asiri, and Kalsoom Akhtar
023003	Electronic structures and phase transition characters of β-, P61-, P62- and δ-Si <sub>3</sub> N <sub>4</sub> under extreme conditions: a density functional theory study (5 pages)  Chen Dong, Cang Yuping, and Luo Yongsong
023004	Effect of hydrogen on low temperature epitaxial growth of polycrystalline silicon by hot wire chemical vapor deposition (5 pages)  Cao Yong, Zhang Hailong, Liu Fengzhen, Zhu Meifang, and Dong Gangqiang
023005	Influence of initial growth conditions and Mg-surfactant on the quality of GaN film grown by MOVPE (4 pages) Cao Junsong, Lü Xin, Zhao Lubing, Qu Shuang, and Gao Wei
023006	Enhanced photovoltaic performance in TiO <sub>2</sub> /P3HT hybrid solar cell by interface modification (4 pages). Wang Duofa, Tao Haizheng, Zhao Xiujian, Ji Meiyan, and Zhang Tianjin
	SEMICONDUCTOR DEVICES
024001	Compact analytical model of double gate junction-less field effect transistor comprising quantum-mechanical effect (6 pages)  Shoubhik Gupta, Bahniman Ghosh, and Shiromani Balmukund Rahi
024002	A novel approach for justification of box-triangular germanium profile in SiGe HBTs (8 pages) Gagan Khanduri and Brishbhan Panwar
024003	High performance 20 nm GaSb/InAs junctionless tunnel field effect transistor for low power supply (6 pages)  Pranav Kumar Asthana

X-parameter measurement on a GaN HEMT device: complexity reduction study of load-pull

024005	<b>Design of InAlAs/InGaAs PHEMTs and small-signal modeling from 0.5 to 110 GHz</b> (5 pages) Wang Zhiming, Lü Xin, Luo Xiaobin, Cui Yuxing, Sun Xiguo, Mo Jianghui, Fu Xingchang, Li Liang, and He Dawei
024006	Frequency stability of InP HBT over 0.2 to 220 GHz (5 pages) Zhou Zhijiang, Ren Kun, Liu Jun, Cheng Wei, Lu Haiyan, and Sun Lingling
024007	$ Effects \ of interface \ trap \ density \ on \ the \ electrical \ performance \ of \ amorphous \ In SnZnO \ thin-film \ transistor \ \it (5\ pages) $
	Liang Yongye, Kyungsoo Jang, S. Velumani, Cam Phu Thi Nguyen, and Junsin Yi
024008	Novel 700 V high-voltage SOI LDMOS structure with folded drift region (5 pages) Li Qi, Li Haiou, Zhai Jianghui, and Tang Ning
024009	A transmission line-type electrical model for tapered TSV considering MOS effect and frequency-dependent behavior (7 $pages$ )
	Liu Song, Shan Guangbao, Xie Chengmin, and Du Xinrong
024010	Ultralow specific on-resistance high voltage trench SOI LDMOS with enhanced RESURF effect (7 pages)
	Xu Qing, Luo Xiaorong, Zhou Kun, Tian Ruichao, Wei Jie, Fan Yuanhang, and Zhang Bo
024011	<b>Wafer-bonding AlGaInP light emitting diodes with pyramidally patterned metal reflector</b> (5 pages) Zuo Zhiyuan, Xia Wei, Wang Gang, and Xu Xiangang
024012	A novel hybrid III–V/silicon deformed micro-disk single-mode laser (5 pages) Feng Peng, Zhang Yejin, Wang Yufei, Liu Lei, Zhang Siriguleng, Wang Hailing, and Zheng Wanhua
024013	Improvements on high voltage capacity and high temperature performances of Si-based Schottky potential barrier diode (4 pages)  Weng Vangelson, Dai Li, Adam Chaffer, Wang Zaining, and Liu Charing.
	Wang Yongshun, Rui Li, Adnan Ghaffar, Wang Zaixing, and Liu Chunjuan  SEMICONDUCTOR INTEGRATED CIRCUITS
025001	SEMICONDUCTOR INTEGRATED CIRCUITS
025001	Low phase noise GaAs HBT VCO in Ka-band (4 pages) Yan Ting, Zhang Yuming, Lü Hongliang, Zhang Yimen, Wu Yue, and Liu Yifeng
025002	Design of a high linearity and high gain accuracy analog baseband circuit for DAB receiver (6 pages)  Ma Li, Wang Zhigong, Xu Jian, Wu Yiqiang, Wang Junliang, Tian Mi, and Chen Jianping
025003	A low power 11-bit 100 MS/s SAR ADC IP (5 pages)
	Wang Ya, Xue Chunying, Li Fule, Zhang Chun, and Wang Zhihua
025004	A novel dimmable LED driver with soft-start and UVLO circuits (9 pages) Jiang Jinguang, Tan Gaojian, Zhang Zeyu, and Zhou Xifeng
025005	A 5 Gb/s low area CDR for embedded clock serial links (7 pages) Li You, Lü Junsheng, Zhou Yumei, Zhao Jianzhong, Chen Yuhu, and Zhang Feng
	SEMICONDUCTOR TECHNOLOGY
026001	Synergic effect of chelating agent and oxidant on chemical mechanical planarization (5 pages) Liu Weijuan and Liu Yuling
026002	Non-ionic surfactant on particles removal in post-CMP cleaning (5 pages) Sun Mingbin, Gao Baohong, Wang Chenwei, Miao Yingxin, Duan Bo, and Tan Baimei