

JAPANESE JOURNAL OF APPLIED PHYSICS

Volume 50, Number 3, March 2011 [Issue 1 of 2]

Comprehensive Reviews

- 030001 **Present Status and Future Prospects of Silicon Thin-Film Solar Cells** (12 pages)
Makoto Konagai

Rapid Communications

- 030201 **Inhomogeneous Barrier Height Analysis of (Ni/Au)-InAlGaN/GaN Schottky Barrier Diode** (3 pages)
Nagarajan Subramaniam, Markku Sopanen, Harri Lipsanen, Chang-Hee Hong, Eun-Kyung Suh
- 030202 **Blueshifting of Ion-Implanted InGaAs/InGaAsP Multiple Quantum Well Structures Using Two-Step Rapid Temperature Annealing Process** (3 pages)
Young Tae Byun, Young-Min Jhon, Sun Ho Kim
- 030203 **Terahertz Birefringence in Zinc Oxide** (3 pages)
Youngchan Kim, Jaewook Ahn, Bog G. Kim, Dae-Su Yee
- 030204 **Efficient Nonvolatile Rewritable Memories Based on Three-Dimensionally Confined Au Quantum Dots Embedded in Ultrathin Polyimide Layers** (3 pages)
Chaoxing Wu, Fushan Li, Tailiang Guo, Bo Qu, Zhijian Chen, Qihuang Gong
- 030205 **Post-thermal Annealing Effects on Photoluminescence Properties of InAs Quantum Dots on GaNAs Buffer Layer** (3 pages)
Tomoyuki Miyamoto, Ryoichiro Suzuki
- 030206 **Multilayer InAs Quantum Dot with GaNAs Strain Compensation Layers Partly Inserted in a Thin Spacer Layer** (3 pages)
Tomoyuki Miyamoto, Ryoichiro Suzuki, Tomoyuki Sengoku
- 030207 **Synthesis of Diamondoids by Supercritical Xenon Discharge Plasma** (3 pages)
Tomoki Shizuno, Hiroyuki Miyazoe, Koya Saito, Sven Stauss, Minoru Suzuki, Takehiko Sasaki, Kazuo Terashima
- 030208 **Ohmic Cathode Electrode on the Backside of *m*-Plane and (20 $\bar{2}$ 1) Bulk GaN Substrates for Optical Device Applications** (3 pages)
Chia-Lin Hsiung, You-Da Lin, Hiroaki Ohta, Steven P. DenBaars, Shuji Nakamura
- 030209 **Thermalization Distance of Electrons Generated in Poly(4-hydroxystyrene) Film Containing Acid Generator upon Exposure to Extreme Ultraviolet Radiation** (3 pages)
Takahiro Kozawa, Seiichi Tagawa
- 030210 **Measurement of Contractile Activity in Small Animal's Digestive Organ by Carbon Nanotube-Based Force Transducer** (3 pages)
Takamichi Hirata, Naoki Takeda, Chihiro Tsutsui, Kanako Koike, Yuichi Shimatani, Takafumi Sakai, Masahiro Akiya, Akira Taguchi

Regular Papers

Semiconductors, dielectrics, and organic materials

- 031001 **Ternary AlGaIn Alloys with High Al Content and Enhanced Compositional Homogeneity Grown by Plasma-Assisted Molecular Beam Epitaxy** (7 pages)
Vincent Fellmann, Périne Jaffrennou, Diane Sam-Giao, Bruno Gayral, Katharina Lorenz, Eduardo Alves, Bruno Daudin
- 031002 **Stress Relaxation in Low-Strain AlInN/GaN Bragg Mirrors** (6 pages)
Pascal Moser, Jürgen Blasing, Armin Dadgar, Thomas Hempel, Jürgen Christen, Alois Krost
- 031003 **Effect of Growth Mode on Eu-Incorporation and Luminescence of Eu-Doped GaN Epitaxial Film Grown by Plasma-Assisted Molecular Beam Epitaxy** (5 pages)
Ji-Ho Park, Akihiro Wakahara, Hiroshi Okada, Hiroto Sekiguchi, Ajay Tiwari, Yong-Tae Kim, Jonghan Song, Jong-Han Lee, Junggeun Jhin
- 031004 **Influence of a GaN Cap Layer on the Morphology and the Physical Properties of Embedded Self-Organized InN Quantum Dots on GaN(0001) Grown by Metal-Organic Vapour Phase Epitaxy** (5 pages)
Francesco Ivaldi, Christian Meissner, Jarosław Domagala, Sławomir Kret, Markus Pristovsek, Michael Högele, Michael Kneissl

(Continued on third cover)