

# 24<sup>th</sup> JSAP Awards

The JSAP (the Japan Society of Applied Physics) Awards are given to recognize outstanding achievements in the field of applied physics for papers published in JSAP and IPAP (the Institute of Pure and Applied Physics) publications: Japanese Journal of Applied Physics (JJAP) and membership journal "OYO BUTURI". There are three categories of the Awards: JJAP Awards for the Best Original Paper, JJAP Awards for the Most Promising Young Scientist,

and JSAP Award for the Best Review Paper. Applications for the Awards were solicited from the candidates themselves or appropriate recommendations.

The JSAP decided themselves the winners of each award listed below. The awards recipients had a commemorative talk during the 63rd Autumn Meeting of the Japan Society of Applied Physics, September 2002.

## Recipients List

### 1. Award for the Best Original Paper

#### (1) Recipients:

**Dharam Pal GOSAIN, Takashi NOGUCHI and Setsuo USUI**

Frontier Science Laboratories, Sony Corporation  
High Mobility Thin Film Transistors Fabricated on a Plastic Substrate at a Processing Temperature of 110°C

Jpn. J. Appl. Phys. Vol.39 (2000) L179-L181, Part 2, No.3A/B, 15 March 2000.

#### (2) Recipients:

**Rajesh Kumar MALHAN, Jun KOZIMA and Tsuyohi YAMAMOTO**

Research Laboratories, DENSO CORPORATION  
A Novel Diffusion Resistant P-Base Region Implantation for Accumulation Mode 4H-SiC Epi-Channel Field Effect Transistor

Jpn. J. Appl. Phys. Vol.39 (2000) 2001-2007, Part 1, No.4B, 30 April 2000.

#### (3) Recipients:

**Seiichiro MATSUMOTO and Wenjun ZHANG**

National Institute for Research in Inorganic Materials

High-Rate Deposition of High-Quality, Thick Cubic Boron Nitride Films by Bias-Assisted DC Jet Plasma Chemical Vapor Deposition

Jpn. J. Appl. Phys. Vol.39 (2000) L442-L444, Part 2, No.5B, 15 May 2000.

#### (4) Recipients:

**Tokushi KIZUKA, Hajime OHMI, Takao SUMI, Katsuyoshi KUMAZAWA, Shunji DEGUCHI\*, Mikio NARUSE\*, Satoru FUJISAWA\*\*, Shinya SASAKI\*\*, Akira YABE\*\* and Yuji ENOMOTO\*\***

School of Engineering, Nagoya University, \*JEOL Ltd., \*\*Mechanical Engineering Laboratory

Simultaneous Observation of Millisecond Dynamics in Atomistic Structure, Force and Conductance on the Basis of Transmission Electron Microscopy

Jpn. J. Appl. Phys. Vol.40 (2001) L170-L173, Part 2, No.2B, 15 February 2001.

#### (5) Recipients:

**Tetsuya AKIYAMA, Mayumi UNO, Hideki KITAURA, Kenji NARUMI, Rie KOJIMA, Kenichi NISHIUCHI and Noboru YAMADA**

Optical Disk Systems Development Center, Matsushita Electric Industrial Co., Ltd.

Rewritable Dual-Layer Phase-Change Optical Disk Utilizing a Blue-Violet Laser

Jpn. J. Appl. Phys. Vol.40 (2001) 1598-1603, Part 1, No.3B, 30 March 2001.

### 2. Award for the Most Promising Young Scientist

#### (1) Takamitsu ISHIIHARA

Advanced LSI Technology Laboratory, Research & Development Center, Toshiba Corporation  
Quantitative Understanding of Electron Mobility Limited by Coulomb Scattering in Metal Oxide Semiconductor Field Effect Transistors with N2O and NO Oxynitrides

Takamitsu ISHIIHARA, Shi-ichi TAKAGI and Masaki KONDO

Jpn. J. Appl. Phys. Vol.40 (2001) 2597-2602, Part 1, No.4B, 30 April 2001.

#### (2) Shin-ichi NAGAHAMA

Nitride Semiconductor Research Laboratory, Nichia Corporation

Ultraviolet GaN Single Quantum Well Laser Diodes

Shin-ichi NAGAHAMA, Tomoya YANAMOTO, Masahiko SANO and Takashi MUKAI

Jpn. J. Appl. Phys. Vol.40 (2001) L785-L787, Part 2, No.8A, 1 August 2001.

#### (3) Musubu ICHIKAWA

Department of Functional Polymer Science, Faculty of Textile Science and Technology, Shinshu University

Photopumped Organic Solid-State Dye Laser with a Second-Order Distributed Feedback Cavity

Musubu ICHIKAWA, Yuji TANAKA, Naotoshi SUGANUMA, Toshiki KOYAMA and Yoshio TANIGUCHI

Jpn. J. Appl. Phys. Vol.40 (2001) L799-L801, Part 2, No.8A, 1 August 2001.

#### (4) Yoshinao MIZUGAKI

Research Institute of Electrical Communication, Tohoku University

Single-Electron Signal Modulator Designed for a Flash Analog-to-Digital Converter

Yoshinao MIZUGAKI and Per DELSING  
Jpn. J. Appl. Phys. Vol.40 (2001) 6157-6162, Part 1, No.10, 15 October 2001.

#### (5) Isaho KAMATA

Central Research Institute of Electric Power Industry, Yokosuka Research Laboratory

Improvement in Electrical Properties of 4H-SiC Epilayers by Micropipe Dissociation

Isaho KAMATA, Hidekazu TSUCHIDA, Tamotsu JIKIMOTO and Kunikazu IZUMI

Jpn. J. Appl. Phys. Vol.40 (2001) L1012-L1014, Part 2, No.10A, 1 October 2001.

### 3. Award for the Best Review Paper

#### (1) Recipients:

**Hiroshi IWAI and Shun-ichiro OHMI\***

Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology

\*Precision and Intelligence Laboratory, Tokyo Institute of Technology

Thin Film Technologies for Advanced CMOS ULSIs

"OYO BUTURI" Vol.69 (2000) No.1 pp.4-14.

#### (2) Recipients:

**Shozo KONO**

Research Institute for Scientific Measurements, Tohoku University

Structural Analyses of Semiconductor Surfaces by Photoelectron

"OYO BUTURI" Vol.69 (2000) No.10 pp.1157-1165.