

Prof. Hiroshi Ishihara

Chairman, JSAP Award Selection Committee

The selection committee had solicited application for the candidates for the 28th JSAP awards through our monthly journal "OYO BUTURI" from January to March issues (both self-recommendation and appropriate recommendation). The committee accepted 31 candidate papers for JJAP Awards for the Best Original Paper, 16 for JJAP Awards for the Most Promising Young Scientists, and 20 recommended documents for JSAP Award for the Best Review Paper. Three members were in charge of reference for each candidate paper and based on their report, the committee discussed and decided on the first-stage candidates. Then all the committee members

reread all the selected papers and through the process of discussion and examination, decided the second-stage candidates and report them to the board meeting. Also, in this process, the member who was included as an author of candidate paper did not join the selection. After final deliberation at the board meeting, we decided to present awards to the following winners. The awards ceremony was held on August 29 after the Autumn Meeting of the Japan Society of Applied Physics (Ritsumeikan University). In addition, commemorative speeches of the winners were held at the relevant workshop sited from August 29 to September 1.

Recipient List

1. Award for the Best Original Paper

- (1) Recipients:
Kwi Young YUN, Dan RICINSCHI, Takeshi KANASHIMA, Minoru NODA and Masanori OKUYAMA (*Osaka Univ.*)
Giant Ferroelectric Polarization Beyond 150 $\mu\text{C}/\text{cm}^2$ in BiFeO₃ Thin Film
Jpn. J. Appl. Phys. Vol.43, No.5A, 2004, pp.L647-L648
- (2) Recipients:
Seiji HORIGUCHI, Akira FUJIWARA, Hiroshi INOKAWA and Yasuo TAKAHASHI (*NTT*)
Analysis of Back-Gate Voltage Dependence of Threshold Voltage of Thin Silicon-on-Insulator Metal-Oxide-Semiconductor Field-Effect Transistor and Its Application to Si Single-Electron Transistor
Jpn. J. Appl. Phys. Vol.43, No.4B, 2004, pp.2036-2040
- (3) Recipients:
Naoyuki ORIHASHI, Shinnosuke HATTORI, Safumi SUZUKI and Masahiro ASADA (*Tokyo Institute of Technology*)
Experimental and Theoretical Characteristics of Sub-Terahertz and Terahertz Oscillations of Resonant Tunneling Diodes Integrated with Slot Antennas
Jpn. J. Appl. Phys. Vol.44, No.11, 2005, pp.7809-7815
- (4) Recipients:
Masataka HIGASHIWAKI and Toshiaki MATSUI (*National Institute of Information and Communications Technology*)
AlGaIn/GaN Heterostructure Field-Effect Transistors with Current Gain Cut-off Frequency of 152 GHz on Sapphire Substrates
Jpn. J. Appl. Phys. Vol.44, No.16, 2005, pp.L475-478
- (5) Recipient:
Kazuo HOTATE and Toyohiko YAMAUCHI (*Univ. of Tokyo*)
Fiber-Optic Distributed Strain Sensing System by Brillouin Optical Correlation Domain Analysis with a Simple and Accurate Time-Division Pump-Probe Generation Scheme
Jpn. J. Appl. Phys. Vol.44, No.32, 2005, pp.L1030-L1033
- (6) Recipient:
Tsutomu ISHI, Junichi FUJIKAWA, Kikuo MAKITA, Toshio BABA and Keishi OHASHI (*NEC*)
Si Nano-Photodiode with a Surface Plasmon Antenna
Jpn. J. Appl. Phys. Vol.44, No.12, 2005, pp.L364-L366

2. Award for the Most Promising Young Scientist

- (1) Hidemi TOYOSAKI (*Tohoku Univ.*)
A Ferromagnetic Oxide Semiconductor as Spin Injection Electrode in Magnetic Tunnel Junction
Hidemi TOYOSAKI, Tomoteru FUKUMURA, Kazunori UENO, Masaki NAKANO and Masashi KAWASAKI
Jpn. J. Appl. Phys. Vol.44, No.28, 2005, pp.L896-L898

- (2) Atsushi TSUKAZAKI (*Tohoku Univ.*)
Blue Light-Emitting Diode Based on ZnO
Atsushi TSUKAZAKI, Masashi KUBOTA, Akira OHTOMO, Takeyoshi ONUMA, Keita OHTANI, Hideo OHNO, Shigefusa FUCHIIBU and Masashi KAWASAKI
Jpn. J. Appl. Phys. Vol.44, No.21, 2005, pp.L643-L645
- (3) Toshihiro TSUJI (*National Institute of Advanced Industrial Science and Technology*)
Evaluation of Domain Boundary of Piezo/Ferroelectric Material by Ultrasonic Atomic Force Microscopy
Toshihiro TSUJI, Hisato OGISO, Jun AKEDO, Shigeru SAITO, Kenji FUKUDA and Kazushi YAMANAKA
Jpn. J. Appl. Phys. Vol.43, No.5B, 2004, pp.2907-2913
- (4) Hidekazu MIMURA (*Osaka Univ.*)
Hard X-ray Diffraction-Limited Nanofocusing with Kirkpatrick-Baez Mirrors
Hidekazu MIMURA, Satoshi MATSUYAMA, Hirokatsu YUMOTO, Hideyuki HARA, Kazuya YAMAMURA, Yasuhisa SANO, Masafumi SHIBAHARA, Katsuyoshi ENDO, Yuzo MORI, Yoshinori NISHINO, Kenji TAMASAKU, Makina YABASHI, Tetsuya ISHIKAWA and Kazuto YAMAUCHI
Jpn. J. Appl. Phys. Vol.44, No.18, 2005, pp.L539-L542
- (5) Masayuki FUJITA (*Kyoto Univ.*)
Optical and Electrical Characteristics of Organic Light-Emitting Diodes with Two-Dimensional Photonic Crystals in Organic/Electrode Layers
Masayuki FUJITA, Kuniaki ISHIHARA, Tetsuya UENO, Takashi ASANO, Susumu NODA, Hiroshi OHATA, Taishi TSUJI, Hitoshi NAKADA and Noriyuki SHIMOJI
Jpn. J. Appl. Phys. Vol.44, No.6A, 2005, pp.3669-3677

3. Award for the Best Review Paper

- (1) Recipients:
Yasuhiko ARAKAWA, Shiro TSUKAMOTO (*Univ. of Tokyo*)
Advances and prospects of fabrication of low-dimensional quantum structures and device applications : Mainly focusing on quantum dots
OYO BUTURI, Vol.74 (2005) NO.3, pp.293-306, Comprehensive Research Report
- (2) Recipient:
Yoshinobu BABA (*Nagoya Univ.*)
Development of Nano-biodevices and their application to research for genomics and proteomics
OYO BUTURI, Vol.74 (2005) NO.12, pp.1543-1554, Comprehensive Research Report
- (3) Recipient:
Hiroyuki MATSUNAMI (*Kyoto Univ.*)
Technological Breakthroughs in Growth Control of Silicon Carbide for High Power Electronic Devices
Jpn. J. Appl. Phys. Vol.43, No.10, 2004, pp.6835-6847