

29th JSAP AWARDS (Year 2007)



JJAP Paper Award

Award Recipients	Jun-ichi Kushibiki, Mototaka Arakawa, Yuji Ohashi, Kouji Suzuki and Takahisa Maruyama
Title of the Paper	A Super-Precise CTE Evaluation Method for Ultra-Low-Expansion Glasses Using the LFB Ultrasonic Material Characterization System
Authours	Jun-ichi Kushibiki, Mototaka Arakawa, Yuji Ohashi, Kouji Suzuki and Takahisa Maruyama
Affiliation	Tohoku University
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 6B, 2005, pp. 4374-4380

Award Recipients	Jun Takeya, Kazuhito Tsukagoshi, Yoshinobu Aoyagi, Taishi Takenobu and Yoshihiro Iwasa
Title of the Paper	Hall Effect of Quasi-Hole Gas in Organic Single-Crystal Transistors
Authours	Jun Takeya ^{1,2,3} , Kazuhito Tsukagoshi ^{2,4} , Yoshinobu Aoyagi ^{2,5} , Taishi Takenobu ^{3,6} and Yoshihiro Iwasa ^{3,6}
Affiliation	¹ CRIEPI, ² RIKEN, ³ Tohoku University, ⁴ PRESTO, ⁵ Tokyo Institute of Technology, ⁶ CREST
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 46, 2005, pp. L1393-L1396

Award Recipients	Shinji Miwa, Masashi Shiraishi, Masaki Mizuguchi, Teruya Shinjo and Yoshishige Suzuki
Title of the Paper	Spin-Dependent Transport in C ₆₀ -Co Nano-Composites
Authours	Shinji Miwa, Masashi Shiraishi, Masaki Mizuguchi, Teruya Shinjo and Yoshishige Suzuki
Affiliation	Osaka University
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 28, 2006, pp. L717-L719

Award Recipients	Yasushi Akasaka, Genji Nakamura, Kenji Shiraishi, Naoto Umezawa, Kikuo Yamabe, Osamu Ogawa, Myoungbum Lee, Toshio Amiaka, Tooru Kasuya Heiji Watanabe, Toyohiro Chikyow, Fumio Ootsuka, Yasuo Nara and Kunio Nakamura
Title of the Paper	Modified Oxygen Vacancy Induced Fermi Level Pinning Model Extendable to P-Metal Pinning
Authours	Yasushi Akasaka ^{1,2} , Genji Nakamura ¹ , Kenji Shiraishi ^{2,3,4} , Naoto Umezawa ³ , Kikuo Yamabe ^{2,3} , Osamu Ogawa ¹ , Myoungbum Lee ¹ , Toshio Amiaka ¹ , Tooru Kasuya ¹ Heiji Watanabe ⁵ , Toyohiro Chikyow ³ , Fumio Ootsuka ¹ , Yasuo Nara ¹ and Kunio Nakamura ¹
Affiliation	¹ Selete, ² University of Tsukuba, ³ National Institute for Materials Science, ⁴ CREST, ⁵ Osaka University
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 49, 2006, pp. L1289-L1292

29th JSAP AWARDS (Year 2007)



Award Recipients	Mitsuru Funato, Masaya Ueda, Yoichi Kawakami, Yukio Narukawa, Takao Kosugi, Masayoshi Takahashi and Takashi Mukai
Title of the Paper	Blue, Green, and Amber InGaN/GaN Light-Emitting Diodes on Semipolar {1122} GaN Bulk Substrates
Authours	Mitsuru Funato, Masaya Ueda, Yoichi Kawakami, Yukio Narukawa ¹ , Takao Kosugi ¹ , Masayoshi Takahashi ¹ and Takashi Mukai ¹
Affiliation	Kyoto University, ¹ Nichia Corporation
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 26, 2006, pp. L659-L662

Award Recipients	Yuzo Furukawa, Hiroo Yonezu, Yuji Morisaki, Soo-Young Moon, Seigi Ishiji and Akihiro Wakahara
Title of the Paper	Monolithic Implementation of Elemental Devices for Optoelectronic Integrated Circuit in Lattice-Matched Si/III-V-N Alloy Layers
Authours	Yuzo Furukawa, Hiroo Yonezu, Yuji Morisaki, Soo-Young Moon, Seigi Ishiji and Akihiro Wakahara
Affiliation	Toyohashi University of Technology
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 35, 2006, pp. L920-L922

Award Recipients	Vinod Adivarahan and Asif Khan
Title of the Paper	Room-Temperature Stimulated Emission from AlN at 214 nm
Authours	Maxim Shatalov, Mikhail Gaevski, Vinod Adivarahan and Asif Khan
Affiliation	University of South Carolina
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 49, 2006, pp. L1286-L1288

Award Recipients	M. Bibes
Title of the Paper	Ferroelectricity Down to at Least 2 nm in Multiferroic BiFeO ₃ Epitaxial Thin Films
Authours	H. Béa, S. Fusil, K. Bouzehouane, M. Bibes ¹ , M. Sirena, G. Herranz, E. Jacquet, J.-P. Contour and A. Barthélémy
Affiliation	Unité Mixte de Physique CNRS-Thales, ¹ Université Paris-Sud
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 7, 2006, pp. L187-L189

29th JSAP AWARDS (Year 2007)



Award Recipients	Toshio Ando, Takayuki Uchihashi, Noriyuki Kodera, Atsushi Miyagi, Hayato Yamashita and Mitsuru Sakashita
Title of the Paper	High-Speed Atomic Force Microscopy for Studying the Dynamic Behavior of Protein Molecules at Work
Authours	Toshio Ando ^{1,2,3} , Takayuki Uchihashi ^{1,3} , Noriyuki Kodera ¹ , Atsushi Miyagi ¹ , Ryo Nakakita ¹ , Hayato Yamashita ¹ and Mitsuru Sakashita ¹
Affiliation	¹ Kanazawa University, ² Kanazawa University, ³ JST/CREST
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 3B, 2006, pp. 1897-1903

Award Recipients	Masahiro Horibe, Mizuhisa Nihei, Daiyu Kondo, Akio Kawabata and Yuji Awano
Title of the Paper	Carbon Nanotube Growth Technologies Using Tantalum Barrier Layer for Future ULSIs with Cu/Low-k Interconnect Processes
Authours	Masahiro Horibe ^{1,2} , Mizuhisa Nihei ^{1,3} , Daiyu Kondo ^{1,3} , Akio Kawabata ^{1,3} and Yuji Awano ^{1,3}
Affiliation	¹ Fujitsu Limited, ² Fujitsu Laboratories Ltd., ³ Fujitsu Laboratories Ltd
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 7A, 2005, pp. 5309-5312

JJAP Young Scientist Award

Award Recipients	Yuya Sakuraba
Title of the Paper	Huge Spin-Polarization of L2 ₁ -Ordered Co ₂ MnSi Epitaxial Heusler Alloy Film
Authours	Yuya Sakuraba, Jun Nakata, Mikihiko Oogane, Hitoshi Kubota ¹ , Yasuo Ando, Akimasa Sakuma and Terunobu Miyazaki
Affiliation	Tohoku University, ¹ AIST
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 35, 2005, pp. L1100-L1102

Award Recipients	Takayuki Tamaki
Title of the Paper	Welding of Transparent Materials Using Femtosecond Laser Pulses
Authours	Takayuki Tamaki, Wataru Watanabe, Junji Nishiil ¹ and Kazuyoshi Itoh
Affiliation	Osaka University, ¹ Kansai Center,AIST
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 22, 2005, pp. L687-L689

29th JSAP AWARDS (Year 2007)



Award Recipients	Masashi Miura
Title of the Paper	Enhancement of Flux-Pinning in Epitaxial $\text{Sm}_{1+x}\text{Ba}_{2-x}\text{Cu}_3\text{O}_y$ Films by Introduction of Low- T_c Nanoparticles
Authours	Masashi Miura ^{1,6} , Yutaka Yoshida ^{1,6} , Yusuke Ichino ^{1,6} , Yoshiaki Takai ¹ , Kaname Matsumoto ^{2,6} , Ataru Ichinose ^{3,6} , Shigeru Horii ^{4,6} and Masashi Mukaida ^{5,6}
Affiliation	¹ Nagoya University, ² Kyoto University, ³ Central Research Institute of Electric Power Industry, ⁴ The University of Tokyo, ⁵ Kyushu University, ⁶ CREST
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 1, 2006, pp. L11-L13
Award Recipients	Takashi Minemoto
Title of the Paper	Fabrication of Spherical Silicon Solar Cells with Semi-Light-Concentration System
Authours	Takashi Minemoto, Chikao Okamoto, Satoshi Omae, Mikio Murozono ¹ , Hideyuki Takakura and Yoshihiro Hamakawa
Affiliation	Ritsumeikan University, ¹ Clean Venture 21 Co
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 7A, 2005, pp. 4820-4824
Award Recipients	Takahisa Koyama
Title of the Paper	Hard X-Ray Nano-Interferometer and Its Application to High-Spatial-Resolution Phase Tomography
Authours	Takahisa Koyama, Takuya Tsuji, Keisuke Yoshida, Hidekazu Takano, Yoshiyuki Tsusaka and Yasushi Kagoshima
Affiliation	University of Hyogo
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 43, 2006, pp. L1159-L1161
Award Recipients	Winadda Wongwiriyan
Title of the Paper	Single-Walled Carbon Nanotube Thin-Film Sensor for Ultrasensitive Gas Detection
Authours	Winadda Wongwiriyan, Shin-ichi Honda, Hirofumi Konishi, Tomoaki Mizuta, Takashi Ikuno, Tatsuya Ito ¹ , Toru Maekawa ¹ , Kengo Suzuki ¹ , Hiroshi Ishikawa ¹ , Kenjiro Oura and Mitsuhiro Katayama
Affiliation	Osaka University, ¹ New Cosmos Electric Co., Ltd.,
Journal	Jpn. J. Appl. Phys. Vol. 44, No. 16, 2005, pp. L482-L484

29th JSAP AWARDS (Year 2007)



Award Recipients	Shuichi Ogawa
Title of the Paper	Rate-Limiting Reactions of Growth and Decomposition Kinetics of Very Thin Oxides on Si(001) Surfaces Studied by Reflection High-Energy Electron Diffraction Combined with Auger Electron Spectroscopy
Authours	Shuichi Ogawa ¹ and Yuji Takakuwa ^{1,2}
Affiliation	Tohoku University, ² CREST
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 9A, 2006, pp. 7063-7079

Award Recipients	Seiichiro Ariyoshi
Title of the Paper	Superconducting Detector Array for Terahertz Imaging Applications
Authours	Seiichiro Ariyoshi, Chiko Otani, Adrian Dobroiu, Hiroshi Matsuo ² , Hiromi Sato ³ , Tohru Taino ⁴ , Kodo Kawase and Hirohiko M. Shimizu ⁵
Affiliation	Riken, ² National Astronomical Observatory of Japan, ³ Riken, ⁴ Saitama University, ⁵ KEK
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 37, 2006, pp. L1004-L1006

Award Recipients	Tsuyoshi Kondo
Title of the Paper	Investigation of Spin Voltaic Effect in a p-n Heterojunction
Authours	Tsuyoshi Kondo, Jun-ji Hayafuji and Hiro Mune-kata
Affiliation	Tokyo Institute of Technology
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 26, 2006, pp. L663-L665

Review Paper Award

Award Recipients	Shin-ichi Takagi
Title of the Paper	Si-based high-mobility MOS transistor technologies
Authours	Shin-ichi Takagi
Affiliation	The University of Tokyo
Journal	OYO BUTURI, Vol.74, No.09,p.1178-1184 (2005)

29th JSAP AWARDS (Year 2007)



Award Recipients	Atsuo Morinaga
Title of the Paper	Units and standards in 21st century
Authours	Atsuo Morinaga
Affiliation	Tokyo University of Science
Journal	OYO BUTURI, Vol.74, No.06,p.0718-0725 (2005)

Award Recipients	Hideo Takezoe and Yoichi Takanishi
Title of the Paper	Bent-Core Liquid Crystals: Their Mysterious and Attractive World
Authours	Hideo Takezoe and Yoichi Takanishi
Affiliation	Tokyo Institute of Technology
Journal	Jpn. J. Appl. Phys. Vol. 45, No. 2A, 2006, pp. 597-625