Friday, December 16 15:30-17:00 *Room 501-503 (5F)*

Poster Presentations

P-01 ***Application of a Three-phase to Single-phase Matrix Converter for a House Hold Type Gas Engine Cogeneration System***
T. Ise and Y. Miura
Osaka Univ.

P-02 ***Improvement of Crystalline Quality of CVD Diamond and Its Application to Electronic Devices***
T. Ito, H. Sato, and O. Maida
Osaka Univ.

P-03 ***Nitride-Based Heterojunction Transistors for Low-Loss and High-Power Electronics***
M. Kuzuhara and H. Tokuda
Univ. of Fukui

P-04 ***Research and Development of Single-Walled Carbon Nanotube Thin-Film Sensor with Sensing Selectivity and Stability***
M. Katayama[1], H. Tabata[1] , and W. Wongwiriyapan[2,3]
[1]Osaka Univ., [2]King Mongkut's Institute of Technology Ladkrabang, [3]Thailand Center of Excellence in Physics

P-05 ***Laser-induced magnetic field on solar cells***
Y. Nakatani[1], N. Watanabe[1], Y. Miyato[1], H. Itozaki[1], and T. Hayashi[2]
[1]Osaka Univ., [2]Sendai National College of Technology

P-06 ***Terahertz Photonics and Science***
M. Tonouchi
Osaka Univ.

P-07 ***Terahertz Photonics and Electronics for Communications and Sensing***
T. Nagatsuma, M. Fujita, S. Hisatake, T. Takada, D. Asa, M. Kawamura, G. Kitahara, Y. Morimoto, K. Arakawa, T. Shiode, T. Ishigaki, and T. Isogawa
Osaka Univ.

P-08 ***Real-time hardware emulation of neural activities in the vertebrate early vision***
H. Okuno, T. Sanada, J. Hasegawa, and T. Yagi
Osaka Univ.

P-09 ***Novel Matter, Material and Devices with High Energy Densities Generated by High Power Lasers***
R. Kodama and N. Ozaki
Osaka Univ.

P-10 ***Differential-Phase-Shift Quantum Key Distribution***
K. Inoue
Osaka Univ.

P-11 ***Microwave and Photonics Technologies for Communication and Measurement Systems***
Y. Okamura, H. Murata, and H. Shiomi
Osaka Univ.

P-12 ***Physical level secure optical communication: M-ary OCDM using multidimensional PSK codes***
T. Kodama[1], K. Kitayama[1], N. Kataoka[2], N. Wada[2], G. Cincotti[3] , and X. Wang[4]
[1]Osaka Univ., [2]National Institute of Information and Communications Technology (NICT), [3]University Roma Tre, [4] Heriot-Watt Univ.

P-13 ***Application of GaInNAs to the Gain Medium of Photonic Crystal Microcavity***
M. Kondow, H. Nagatomo, K. Kukita, H. Goto, R. Nakao, K. Nakano, and F. Ishikawa
Osaka Univ.

P-14 ***Integrated Quantum Photonic Devices***
T. Suhara, M. Fujimura, and M. Uemukai
Osaka Univ.

P-15 ***High Ambipolar Carrier Mobility of Discotic Liquid Crystalline Molecules and Its Application for Solar Cells***
M. Ozaki
Osaka Univ.

P-16 ***Solution processed light-emitting diodes and field-effect transistors utilizing poly(alkylfluorene) derivatives***
Y. Ohmori, T. Kojima, Y. Kusumoto, and H. Kajii
Osaka Univ.

P-17 ***Crystal growth of functional materials***
M. Yoshimura and Y. Mori
Osaka Univ.

P-18 ***Quantum Transport in Nanoscale CMOS Transistors***
N. Mori[1,2], H. Minari[1,2], G. Mil'nikov[1,2] , and Y. Kamakura[1,2]
[1]Osaka Univ., [2]CREST, JST.

P-19 ***Alkali-metal adsorption and manipulation on a hydroxylated TiO2 (110) surface using atomic force microscopy***
A. Yurtsever[1], Y. Sugimoto[1], M. Abe[1], K. Matsunaga[2,3], I. Tanaka[2], and S. Morita[1]
[1]Osaka Univ., [2]Kyoto Univ., [3]Nagoya Univ.

P-20 ***Ultra-Low-Voltage CMOS Digital Circuit Technique with Performance Compensation***
T. Matsuoka and J. Wang
Osaka Univ.

P-21 ***All-Optical Modulation Format Conversion Using Highly Nonlinear Fibers***
A. Maruta
Osaka Univ.

P-22 ***Photovoltaic Properties in Interpenetrating Heterojunction Organic Solar Cells Utilizing Metal Oxide Charge Transport Buffer Layers***
A. Fujii[1], T. Hori[1], A. Semba[1], J. Sakamoto[1], Y. Inoue[1], W. Yonan[1], J. Kim[1], D. Q. Duy[1], Y. Ogawa[1], T. Masuda[1], T. Hayashi[1], H. Kubo[1], H. Yoshida[1], F. Ishikawa[1], K. Morita[1], M. Abe[1], M. Ozaki[1], J. Sakai[2], H. Rahmat[3], W. Feng[4], M. Shkunov[5], Y. Shimizu[6]
[1]Osaka Univ., [2]Matsushita Electric Works, Ltd., [3]Institut Teknologi Bandung, [4]Tianjin Univ., [5]Univ. of Surrey, [6]Advanced Industrial Science and Technology Kansai

P-23 ***Wireless On-chip Microparticle Manipulation for Smart Sensor on CMOS LSIs***
T. Matsuoka, S. Ueda, Y. Miyawaki, and J. Wang
Osaka Univ.

P-24 ***Local magnetic field of the sample surface investigated by an STM-SQUID***
N. Watanabe[1], Y. Miyato[1], Y. Nakatani[1], M. Tachiki[2], T. Hayashi[2,3], and H. Itozaki[1]
[1]Osaka Univ., [2]National Institute for Materials Science, [3]Sendai National College of Technology

P-25 ***Development of plasma photonic device generating high-intensity electromagnetic radiation toward diagnostics of electronic device***
A.Kon[1], J. Shin[1], A.Nishida[1], Y. Mizuta[1], M. Nakatsutsumi[2], A. Zhidkov[3], T. Higashiguchi[4,6], N. Nakanii[1], J.Fuchs[2], T. Hosokai[3], Y. Sentoku[5], Z. Jin[2], N.Yugami[4,6], and R. Kodama[1,6]
[1,3]Osaka Univ., [2]CNRS and Université Paris VI, [4]Utsunomiya Univ., [5]Univ. of Nevada, [6]CREST, JST.

P-26 ***The unit for the development of terahertz devices and systems***
I. Kawayama
Osaka Univ.

P-27 ***Multiscale Simulation for Electronic Devices Innovation***
N. Mori[1], K. Kukita[1], T. Kitayama[1], H. Minari[1], G. V. Mil'nikov[1], Y. Kamakura[1], S. Uno[2], K. Kodama[3], and M. Kuzuhara[3]
[1]Osaka Univ., [2]Ritsumeikan Univ., [3]Univ. of Fukui

P-28 ***Printable thin-film transistors based on crystallized organic films for display applications***
H. Kajii, Y. Nakanishi, D. Terashima, Y. Kusumoto, and Y. Ohmori
Osaka Univ.

P-29 ***Research on Power Electronics Applications of Wide Band Gap Devices***
Y.Miura and Research Unit of the System Using Next Generation Power Semiconductor Devices
Osaka Univ.

P-30 ***Growth of Bulk GaN crystals by Na flux method***
M. Imade, M. Maruyama, M. Yoshimura, Y. Kitaoka, T. Sasaki, and Y. Mori
Osaka Univ.

P-31 ***Generation and Detection of Microwaves and Terahertz Waves Using Photonic Technologies and Its Applications***
S. Hisatake, Q. Hong Ngo, Y. Omura, K. Tagashira, G. Kitahara, Y. Morimoto, H. Shiomi, H. Murata, T. Nagatsuma, and Y. Okamura
Osaka Univ.,

P-32 ***Exploration of new materials toward innovative devices***
N. Ozaki[1], K. Miyanishi[1], T. Endo[1], T. Jitsui[1], N. Yokoyama[1], Y. Asaumi[1], K. Nakatsuka[1], H. Uranishi[1], T. Sano[1], T. Terai[1], R. Kodama[1], T. Kimura[2], Y. Inubushi[3], A. Benuzzi-Mounaix[4], E. Brambrink[4], A. Ravasio[4], T. Vinci[4], M. Koenig[4], G. Gregori[5], K. Falk[5], C. Murphy[5], D. Riley[6], M. Makita[6], W. J. Nellis[7], T. Mashimo[8], K. Shimizu[1], T. Okuchi[9], T. Sano[1], and Y. Sakawa[1]
[1]Osaka Univ., [2]Ehime Univ., [3]RIKEN, [4]CNRS-CEA-Universit´e Paris VI, [5]Univ. of Oxford, [6]Queens Univ. of Belfast, [7]Harvard Univ., [8]Kumamoto Univ., [9]Okayama Univ.