

Poster Presentations

Wednesday, July 28 15:00-18:00 (Conference Room B and C)

Po-1

Small-Amplitude Dynamic Force Microscopy Using a Quartz Cantilever and an Optical Interferometer

K. Morita, Y. Sasagawa, Y. Sugimoto, M. Abe and S. Morita

Graduate School of Engineering, Osaka University, Japan

Po-2

A Low Power Pipelined ADC Using Controllable Transconductance Amp for Image Sensor

T. Okura, T. Ido and K. Taniguchi

Graduate School of Engineering, Osaka University, Japan

Po-3

High-Temperature DC Characteristics of AlGa_N/Ga_N HEMTs

M. Hatano, J. Yamazaki, H. Tokuda and M. Kuzuhara

Graduate School of Engineering, University of Fukui, Japan

Po-4

Calculation of Impact Ionization Rate in Wurtzite Ga_N

K. Kodama, T. Kimizu and M. Kuzuhara

Graduate School of Engineering, University of Fukui, Japan

Po-5

Evaluation of Characteristics of Photo-Excited Silicon Wafer by Terahertz Time-Domain Spectroscopy

K. A. Salek, K. Takayama, I. Kawayama, H. Murakami and M. Tonouchi

Institute of Laser Engineering, Osaka University, Japan

Po-6

A Design of Parallel Analog-to-Digital Converter Utilizing Process Variations

H. Ham, J. Wang, T. Matsuoka and K. Taniguchi

Graduate School of Engineering, Osaka University, Japan

Po-7

An Optimal Distribution of Per-Stage Resolution for a 12-Bit 1-Msps Two-Stage Pipelined SAR Analog to Digital Converter

K. Imai, T. Ohkura, T. Ido and K. Taniguchi

Graduate School of Engineering, Osaka University, Japan

Po-8

Design of LNA for Triple-Band GPS Applications

I. Jo¹⁾, T. Matsuoka¹⁾, K. Taniguchi¹⁾ and T. Ebinuma²⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Graduate School of Engineering, The University of Tokyo, Japan

Po-9

Electrical Properties of LaAlO Film after Waterless Process Using Organic Solvent Containing Anhydrous HF

M. Honjo, N. Komatsu, C. Kimura and H. Aoki

Graduate School of Engineering, Osaka University, Japan

Po-10

An Area Efficient Bandgap Reference Utilizing Switched Current

Bogoda A. Indika U. K., T. Ido and K. Taniguchi

Graduate School of Engineering, Osaka University, Japan

Po-11

A Dynamic Dither Gain Control Technique for Delta-Sigma DACs Using Second Order Dynamic Element Matching

Y. Tamura, T. Ido and K. Taniguchi

Graduate School of Engineering, Osaka University, Japan

Po-12

Influence of O₂ Plasma Treatment on Properties of Low-K (Methyl-BCN) Film

Z. Lu, M. Hara, T. Masuzumi, M. Nishizaki, C. Kimura, H. Aoki and T. Sugino

Graduate School of Engineering, Osaka University, Japan

Po-13

Annealing Effect on Photoluminescence of Tb-Doped AIBNO Films for White Light-Emitting Diodes

K. Masumoto, A. Semba, C. Kimura and H. Aoki

Graduate School of Engineering, Osaka University, Japan

Po-14

Preparation of a Highly Sensitive Photoresponsive Graphene-Azobenzene Hybrid

X. Q. Zhang, Y. Y. Feng and W. Feng

School of Materials Science and Engineering, Tianjin University, China

Po-15

Influence of Inserting AlN into AlSiON/4H-SiC for the MIS Structure

N. Komatsu, T. Satoh, M. Honjo, C. Kimura and H. Aoki

Graduate School of Engineering, Osaka University, Japan

Po-16

Characteristics of Solution-Processed Organic Photodetectors Using Polyfluorene and Fullerene Derivatives

T. Hamasaki¹⁾, T. Morimune²⁾, H. Kajii¹⁾, S. Minakata³⁾, T. Nagamachi³⁾, Y. Ohmori¹⁾

¹⁾ Center for Advanced Science and Innovation, Osaka University, Japan

²⁾ Department of Electronic System, Kagawa National College of Technology,
Japan

³⁾ Graduate School of Engineering, Osaka University, Japan

Po-17

Modulation Mechanism of Metal-Insulator Transition Temperature by Doing W in (V,W)O₂ Thin Films

H. Takami¹⁾, T. Kanki¹⁾, S. Ueda²⁾, K. Kobayashi²⁾ and H. Tanaka¹⁾

¹⁾ The Institute of Scientific and Industrial Research, Osaka University, Japan

²⁾ NIMS Beamline Station Spring-8, National Institute for Material Science,
Japan

Po-18

Carrier Mobility Behaviour in the Homologues of 1,4,8,11,15,18,22,25-Octaalkylphthalocyanine

Y. Miyake^{1),2)}, T. Hori²⁾, N. Yamasaki²⁾, H. Yoshida²⁾, A. Fujii²⁾, M. Ozaki²⁾ and Y. Shimizu¹⁾

¹⁾ Nanotechnology Research Institute at Kansai Centre, National Institute of Advanced Industrial Science and Technology (AIST), Japan

²⁾ Graduate School of Engineering, Osaka University, Japan

Po-19

Fabrication of (Fe,Zn)₃O₄ -BiFeO₃ Nano-Pillar Structure by Self-Assembly Growth

T. Sakamoto, T. Kanki, A. Hattori and H. Tanaka

The Institute of Scientific and Industrial Research, Osaka University, Japan

Po-20

Fabrication of ZnO Nano Structures by Using Sidewall Growth

A. Ono, A. N. Hattori, T. Kanki and H. Tanaka

The Institute of Scientific and Industrial Research, Osaka University, Japan

Po-21

Emission Characteristics of Organic Light-Emitting Diodes Based on a Series of Methylene-Vaulted Trans-Bis(salicylaldiminato)platinum Complexes

D. Kasama¹⁾, H. Kajii¹⁾, M. Okada²⁾, N. Komiya²⁾, T. Naota²⁾ and Y. Ohmori¹⁾

¹⁾ Center for Advanced Science and Innovation, Osaka University, Japan

²⁾ Graduate School of Engineering Science, Osaka University, Japan

Po-22

Phonon Modulation Effects on Scattering Rate in Graphene Nano-Ribbons

T. Kitayama¹⁾, H. Minari¹⁾, N. Mori^{1),2)}

⁽¹⁾ Graduate School of Engineering, Osaka University, Japan

⁽²⁾ CREST, Japan Science and Technology Agency, Japan

Po-23

Buffer Layer Effects in Organic Thin-Film Solar Cells with Conducting Polymer/C₆₀ Interpenetrating Interface

T. Hori, H. Moritou, N. Fukuoka, J. Sakamoto, A. Fujii and M. Ozaki

Graduate School of Engineering, Osaka University, Japan

Po-24

Hybrid Polymer Gratings Fabricated by Laser Interference Technique and Photopumped Lasing Generation from Those Structures

S. Hidayat¹⁾, P. Pitriana²⁾, R. Hidayat²⁾, A. Fujii³⁾ and M. Ozaki³⁾

¹⁾ Faculty of Mathematics and Natural Sciences, University of Padjadjaran, Indonesia

²⁾ Faculty of Mathematics and Natural Sciences, Bandung Institute of Technology, Indonesia

³⁾ Graduate School of Engineering, Osaka University, Japan

Po-25

Investigation of Surface Plasmon Effect on Luminescence of Organic Dyes

W. Y. Wismanto¹⁾, R. Hidayat²⁾, Y. Fujiwara¹⁾, N. Yamasaki¹⁾, Y. Ogawa¹⁾, A. Fujii¹⁾ and M. Ozaki¹⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Faculty of Mathematics and Natural Sciences, Bandung Institute of Technology, Indonesia

Po-26

Analysis of Optical Coupling between Cavity and Waveguide Modes in Two-Dimensional Photonic Crystals

K. Nagahara, M. Morifuji and M. Kondow

Graduate School of Engineering, Osaka University, Japan

Po-27

Development of Laser Scanning Terahertz Imaging System with 1.56 μm Femtosecond Fiber Laser

K. Serita¹⁾, S. Mizuno¹⁾, H. Murakami¹⁾, I. Kawayama¹⁾, M. Tonouchi¹⁾, Y. Takahashi²⁾,

M. Yoshimura²⁾, Y. Kitaoka²⁾, Y. Mori²⁾ and T. Sasaki²⁾

¹⁾ Institute of Laser Engineering, Osaka University, Japan

²⁾ Graduate School of Engineering, Osaka University, Japan

Po-28

FDTD Analysis on Optical Characteristics of Rare-Earth-Doped Photonic Crystal Waveguide

T. Tajiri¹⁾, S. Matsuda¹⁾, T. Tamaki^{2),3)}, S. Ono¹⁾

¹⁾ Department of Electrical Engineering, Nara National College of Technology,
Japan

²⁾ Department of Control Engineering, Nara National College of Technology,
Japan

³⁾ Edward S. Rogers Sr. Department of Electrical and Computer Engineering,
University of Toronto, Canada

Po-29

Investigation of Cut-Off Frequency of Optical Scintillation

K. Kim, T. Higashino, K. Tsukamoto and S. Komaki

Graduate School of Engineering, Osaka University, Japan

Po-30

Evaluation of Laser Processing Technique with Double Beam Laser System Using CO₂ and Femtosecond Lasers

S. Matsuda¹⁾, T. Tajiri¹⁾, T. Tamaki^{2),3)}, S. Ono¹⁾

¹⁾ Department of Electrical Engineering, Nara National College of Technology,
Japan

²⁾ Department of Control Engineering, Nara National College of Technology,
Japan

³⁾ Edward S. Rogers Sr. Department of Electrical and Computer Engineering,
University of Toronto, Canada

Po-31

Secure Optical Communication: 2.5 Gbps, 16-Ary OCDM Using a Single Multi-Port Encoder/Decoder

T. Kodama¹⁾, N. Nakagawa¹⁾, N. Kataoka²⁾, N. Wada²⁾, G. Cincotti³⁾, X. Wang⁴⁾, T. Miyazaki²⁾ and
K. Kitayama¹⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ National Institute of Information and Communication Technology, Japan

³⁾ Department of Applied Electronics, University Roma Tre, Italy

⁴⁾ School of Engineering and Physical Sciences, Heriot-Watt University, U. K.

Po-32

Electrical Tuning of Grating Coupling to Surface Plasmon Resonance with Vertical Alignment Liquid Crystal

Y. Ogawa, Y. Fujiwara, H. Kubo, H. Yoshida, A. Fujii and M. Ozaki

Graduate School of Engineering, Osaka University, Japan

Po-33

Terahertz Switching Device Using a Etalon Containing a Nematic Liquid Crystal

T. Kumagai¹⁾, R. Ito^{1),2)}, K. Takeya³⁾, H. Kubo¹⁾, H. Yoshida¹⁾, A. Fujii¹⁾, T. Nose²⁾, M. Tonouchi³⁾ and M. Ozaki¹⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Department of Electronics and Information System, Akita Prefectural University, Japan

³⁾ Institute of Laser Engineering, Osaka University, Japan

Po-34

Low-Threshold Cholesteric Liquid Crystal Lasers with in-Plane Helix Alignment

Y. Inoue, H. Yoshida, K. Inoue, A. Fujii and M. Ozaki

Graduate School of Engineering, Osaka University, Japan

Po-35

Optical Switching of Blazed Transmission Gratings Combined with Azobenzene Doped Polymer

C. Qu, D. Kuang and Z. Fang

Institute of Modern Optics, Nankai University, China

Po-36

A Simple Proximity Effect Correction Technique for Electron Beam Patterning of Modulated Photonic Crystal Cavity

K. Kukita, S. Ueda, F. Ishikawa, H. Momose and M. Kondow

Graduate School of Engineering, Osaka University, Japan

Po-37

A New Electro-Optic Microwave-Lightwave Converter Using a Square Patch Antenna Embedded with a Narrow Gap

Y. N. Wijayanto, H. Murata, H. Shiomi and Y. Okamura

Graduate School of Engineering Science, Osaka University, Japan

Po-38

Light Emission Images of Stacking Faults in TEDREC Phenomena for 4.5 kV SiCGT

K. Nakayama^{1),2)}, Y. Miyanagi²⁾, K. Asano²⁾, S. Ogata²⁾, T. Izumi²⁾ and A. Tanaka²⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Kansai Electric Power Co., Inc., Japan

Po-39

Growth of GaN Films with Low Oxygen Concentration Using Ga₂O Vapor and NH₃

Y. Bu¹⁾, M. Imade¹⁾, T. Sumi¹⁾, H. Kishimoto¹⁾, M. Yoshimura¹⁾, T. Sasaki¹⁾, Y. Kitaoka¹⁾, M. Isemura²⁾ and Yu. Mori¹⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Itochu Plastics Inc., Japan

Po-40

A Study on Next Generation Power Device Applications by Analytic Hierarchy Process

Y. Omagari, O. Saeki and Y. Miura

Graduate School of Engineering, Osaka University, Japan

Po-41

A Start-Up Method during Blackout of Doubly-Fed Induction Generator Applied to Gas Engine Cogeneration System

T. Daido¹⁾, Y. Miura¹⁾, T. Ise¹⁾ and Y. Sato²⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Osaka Gas Co., Japan

Po-42

Noncontact Electrical Property Evaluation of Grain Boundaries on Polycrystalline Solar Cell Using a Laser-SQUID Microscope

Y. Nakatani¹⁾, N. Watanabe¹⁾, T. Hayashi²⁾ and H. Itozaki¹⁾

⁽¹⁾ Graduate School of Engineering Science, Osaka University, Japan

⁽²⁾ Sendai National College of Technology, Japan

Po-43

Evaluation of the Effect of Optical Parameter Deviation on the High Resolution Topographic Imaging

Y. Ohmura and Y. Okamura

Division of Advanced Electronics and Optical Science, Osaka University, Japan

Po-44

An Intelligent Vision System with Adaptive Edge Enhancement Filter

S. Yasukawa, H. Okuno and T. Yagi

Graduate School of Engineering, Osaka University, Japan

Po-45

Development of THz-Wave Detection System with High-Tc Super-Conductor Josephson Junction

R. Kaneko, I. Kawayama, H. Murakami and M. Tonouchi

Institute of Laser Engineering, Osaka University, Japan

Po-46

The Effects of an Electric-Field Application on Properties of P(VDF-TcFE) Thin Film

J.-H. Jeong, D. Terashima, C. Kimura and H. Aoki

Graduate School of Engineering, Osaka University, Japan

Po-47

Optical and Electrical Anisotropy of Pi-Conjugated Polymer Films Fabricated by Using Geometrically-Asymmetric Structures

N. Yamasaki, H. Utsumi, Y. Miyake, H. Yoshida, A. Fujii and M. Ozaki

Graduate School of Engineering, Osaka University, Japan

Po-48

Optically Pumped Lasing Emission from Conjugated Polymer MEH-PPV Doped Polystyrene Thin Films

S. Zhang^{1),2)} and D. Ma¹⁾

⁽¹⁾ Graduate School of Chinese Academy of Sciences, China

⁽²⁾ College of Electronic Science and Engineering, Jilin University, China

Po-49

Control Scheme of the DC Linked Solar and Gas Engine Hybrid Generation System for Residential Houses

C. Lung¹⁾, S. Miyake¹⁾, H. Kakigano¹⁾, Y. Miura¹⁾, T. Ise¹⁾, T. Momose²⁾, H. Hayakawa²⁾

⁽¹⁾ Graduate School of Engineering, Osaka University, Japan

⁽²⁾ Osaka Gas Co., Japan

Po-50

Formation of a Transient Plasma Micro Optics for Laser Wakefield Acceleration

Y. Mizuta¹⁾, A. Nishida¹⁾, S. Kajino¹⁾, S. Masuda²⁾, M. Kando⁴⁾, M. Mori⁴⁾, H. Kotaki⁴⁾, Y. Hayashi⁴⁾, S. V. Bulanov⁴⁾, A. G. Zhidkov⁵⁾, T. Hosokai^{2),3)} and R. Kodama^{1),2),3)}

⁽¹⁾ Graduate School of Engineering, Osaka University, Japan

⁽²⁾ Photon Pioneers Center, Osaka University, Japan

⁽³⁾ Japan Science and Technology Agency, CREST, Japan

⁽⁴⁾ Kansai Photon Science Institute, Japan Atomic Energy Agency, Japan

⁽⁵⁾ Central Research Institute of Electric Power Industry, Japan

Po-51

Low Frequency AC Transmission System Using 12-Pulse Cycloconverter in the City Area

P. Achara, T. Ise and Y. Miura

Graduate School of Engineering, Osaka University, Japan

Po-52

Crystal Structure of Transition Metal Oxynitride Thin Films

K. Fukumura¹⁾, M. Hirai¹⁾, M. Fukugauchi²⁾, M. Asano²⁾ and T. Taniguchi²⁾

⁽¹⁾ Nara National College of Technology, Japan

⁽²⁾ Nara Prefectural Institute of Industrial Technology, Japan

Po-53

Simulation Studies on Calcium Dynamics in the Visual Cortical Network

K. Tsuzaki and T. Yagi

Graduate School of Engineering, Osaka University, Japan

Po-54

A Retina Emulator

T. Sanada¹⁾, J. Hasegawa²⁾, H. Okuno²⁾ and T. Yagi¹⁾

⁽¹⁾ Graduate School of Engineering, Osaka University, Japan

⁽²⁾ Commuture Corp., Japan

Po-55

Ferroelectric Phase Transition of Strained SrTiO₃ Thin Film

R. Kinjo, I. Kawayama, H. Murakami and M. Tonouchi

Institute of Laser Engineering, Osaka University, Japan

Po-56

Influence of Magnetic Field on Permeability of Electroplating Permalloy for Micro Generation Devices

E. Kubo, N. Ooi, H. Ohmori, H. Aoki, D. Watanabe, J.-H. Jeong and C. Kimura

Graduate School of Engineering, Osaka University, Japan

Po-57

Nonlinear Transmission of Intense Extreme-Ultraviolet Light in Solid Materials

Y. Inubushi¹⁾, H. Yoneda²⁾, T. Kumagai¹⁾, D. Kimura¹⁾, K. Nakatsuka¹⁾, F. Sato²⁾ and R. Kodama¹⁾

¹⁾ Graduate School of Engineering, Osaka University, Japan

²⁾ Institute for Laser Science, University of Electro-Communications, Japan