Poster Program

Poster session (November 15, 12:10-13:40)

P1
“Near-infrared sensitivity improvement of thin InGaAs photodetector with Au grating for high-speed optical communication”

Toshiki Masuzawa[1], Atsushi Ono[1]
[1]Shizuoka University

P2
“Computational Modeling and Machine Learning of Semiconductor Materials and Processes”

Ian Kerby[1], Lan Li[1]
[1]Micron School of Materials Science and Engineering, Boise State University

P3
“Evaluation of the GaN HEMT with Floating Gate to Improve Breakdown Voltage”

Hayato Kosaka[1], Takao Okuno[1], Iori Shinke[1], Riichiro Shirota[2], Yoshiteru Amemiya[3], Akinobu Teramoto[1,3,4]
[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Colleage of Semiconductor Research, National Tsing Hua University, [3]Research Institute for Semiconductor Engineering, Hiroshima University, [4]Research Institute for Synchrotron Radiation Science, Hiroshima University

P4
“Investigation of the impact of dumping-like torque by inserting Gd-CoFeB alloy at the W/CoFeB interface”

Kazuhiko Tokunaga[1], Yuichiro Kurokawa[1], Hiromi Yuasa[1]
[1]Graduate School and Faculty of Information Science and Electrical Engineering, Kyushu University

P5
“Optimized insertion of Co-layers on the magnetic properties of Mn1.5Ga/MgO system”

Nur Amirah Zahrin[1], Kazuhiko Tokunaga[1], Yuichiro Kurokawa[1], Hiromi Yuasa [1]
[1]Kyushu University

P6
“Development of a time-resolved system using a microfluidic channel for observing the conformational changes of proteins”

Satoshi Hashimoto[1], Koichi Matsuo[1,2,3]
[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Research Institute for Synchrotron Radiation Science, Hiroshima University, [3]International Institute for Sustainability with Knotted Chiral Meta Matter (WPI-SKCM2), Hiroshima University

P7
“Coupling of Self-Generated Spin Waves and Spin Transfer Torque Driven Oscillations in Biquadratic Coupled Orthogonal Magnetization Disks”

Tsz Chung Cheng[1], Chuhan Liu[1], Yuichiro Kurokawa[1], Hiromi Yuasa [1]
[1]Graduation School and Faculty of Information Science and Electrical Engineering, Kyushu University

P8
“Investigation of the Electronic Band Structure of Altermagnetic Semiconductor MnTe (0001) Using ARPES”

Kazi Golam Martuza[1]
[1]Graduate School of Advanced Science and Engineering, Hiroshima University

P9
“Development of high-efficiency spin- and angle-resolved photoemission spectrometer at HiSOR”

Kazuki Sumida[1], Takuma Iwata[2,3], Takahito Takeda[2], Akio Kimura[2,3,4], Kenta Kuroda[2,3,4], Koji Miyamoto[1], Taichi Okuda[1,3,4]
[1]Research Institute for Synchrotron Radiation Science (HiSOR), Hiroshima University, [2]Graduate School of Advanced Science and Engineering, Hiroshima University, [3]International Institute for Sustainability with Knotted Chiral Meta Matter (WPI-SKCM2), Hiroshima University, [4]Research Institute for Semiconductor Engineering (RISE), Hiroshima University

P10
“Compositional analysis of highly-doped silicon-on-insulator thin films for nanodevices”

Taichi Hirano[1], Shun Masui[1], Reon Asai[1], Baskoro Arif Rianto[1], Daniel Moraru[1,2]
[1]Graduate School of Integrated Science and Technology, Shizuoka University, [2]Research Institute of Electronics, Shizuoka University

P11
“Resist stripping with High Concentration O_3-Water”

Kengo Yamada[1], Takayuki Jizaimaru[1]
[1]Nomura Micro Science Co., Ltd., [2]Nomura Micro Science Co., Ltd.

P12
“Observation of Spin Seebeck Effect in YIG/Pt-Rh”
Shuto Sahara[1], Yuichiro Kurokawa[1], Hiromi Yuasa[1]
[1]Kyushu University

P13
“Write Error Rate of Magnetic Tunnel Junction with Intermediate State”
Chihiro Watanabe[1], Yuya Miyazaki[1], Junichi Tsuchimoto[2], Hiroyuki Hosoya[3], Kazuto Yamanaka[3], Yoshiteru Amemiya[2], Akinobu Teramoto[1,2,4]
[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Research Institute for Semiconductor Engineering, Hiroshima University, [3]CANON ANELVA Corporation, [4]Research Institute for Synchrotron Radiation Science, Hiroshima University

P14
“Evaluation of Switching Characteristics for Magnetic Tunnel Junction with Intermediate State”
Yuya Miyazaki[1], Chihiro Watanabe[1], Junichi Tsuchimoto[2], Hiroyuki Hosoya[3], Kazuto Yamanaka[3], Yoshiteru Amemiya[2], Akinobu Teramoto[1,2,4]
[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Research Institute for Semiconductor Engineering, Hiroshima University, [3]CANON ANELVA Corporation, [4]Research Institute for Synchrotron Radiation Science, Hiroshima University

P15
“Study of silicon-on-insulator low-dimensional highly-doped pn diodes for clarification of band-to-band tunneling”
Baskoro Arif Rianto[1], Daris Alfafa[2,3], Shun Masui[1], Itsuki Yano[4], Arief Udhiarto[3], Daniel Moraru[1,2,4,5]
[1]Graduate School of Integrated Science and Technology, Shizuoka University, [2]Graduate School of Science and Technology, Shizuoka University, [3]Department of Electrical Engineering, University of Indonesia, [4]Faculty of Engineering, Shizuoka University, [5]Research Institute of Electronics, Shizuoka University

P16
“A Skin Roughness Evaluation Method Focusing on Local Skin Surface Structure Using Deep Learning”
Tatsuki Ohta[1], Tetsushi Koide[1], Kenta Nakamoto[2], Yuki Hayashida[2], Yumi Aoyama[2]
[1]Research Institute for Semiconductor Engineering, Hiroshima University, [2]Dermatology, Kawasaki Medical School

P17
“A Full-screen Real-time Diagnostic Support Method with Simultaneous Detecting and Classifying for Colonoscopy Lesion”
Yongfei Wu[1], Daisuke Katayama[1], Tetsushi Koide[1], Toru Tamaki[2], Shigeto Yoshida[3], Shin Morimoto[4], Yuki Okamoto[4], Shiro Oka[4], Shinji Tanaka[5]
[1]Research Institute for Semiconductor Engineering, Hiroshima University, [2]Department of Computer Science, Nagoya Institute of Technology, [3]Department of Gastroenterology, Medical Corporation JR Hiroshima Hospital, [4]Department of Gastroenterology and Metabolism, Hiroshima University Hospital, [5]Department of Gastroenterology, JA Onomichi General Hospital

P18
“500°C Operation of Gate Driver Circuits Using 4H-SiC MOSFETs for High-Power Applications”
Vuong Van Cuong[1], Tatsuya Meguro[1], Seiji Ishikawa[2], Tomonori Maeda[2], Hiroshi Sezaki[2], Shin-Ichiro Kuroki[1]
[1]Research Institute for Semiconductor Engineering, Hiroshima University, [2]Phenitec Semiconductor Corp.

P19
“Solution-Processed 2D-Layered MoS_2: Exploring Interface Mechanisms”
Md Iftekharul Alam[1], Shungo Nagata[2], Rikiya Sumichika[2], Junichi Tsuchimoto[1], Akinobu Teramoto[1,2]
[1]Research Institute for Semiconductor Engineering, [2]Graduate School of Advanced Science and Engineering, Hiroshima University

P20
“Evaluation of Distance Dependence of Received Power of Local 5G in Indoor Environments”
Taketo Kakimoto[1], Tomokazu Watanabe[1], Tatsuya Hatagi[1], Masataka Miyake[1], Suguru Kameda[1]
[1]Research Institute for Semiconductor Engineering, Hiroshima University

P21
“Selective wet-POA Process for 4H-SiC CMOS Image Sensors”
Katsuki Hachimata[1], Tatsuya Meguro[1], Akinori Takeyama[2], Takeshi Ohshima[2], Yasunori Tanaka[3], Kazutoshi Kojima[3], Shin-Ichiro Kuroki[1]
[1]Research Institute for Semiconductor Engineering, Hiroshima University, [2]National Institutes for Quantum Science and Technology, [3]National Institute of Advanced Industrial Science and Technology

P22

“Atomic Layer Deposition Using a High Vapor Pressure Precursor and oxygen followed by Postdeposition Annealing for Area Selective Deposition”

Rahman Gagi Tauhidur[1,2], Shogo Okugawa1[1,2], Akinobu Teramoto[1,2]

[1]Quantum Matter Program, Advance Science and Engineering, [2]Research Institute for Semiconductor Engineering, Hiroshima University

P23

“Development of a molecular beam epitaxy system for the investigation of magnetic semiconductors/semimetals”

Yuita Fujisawa[1], Haruto Sato[1], Kazuki Sumida[1], Koji Miyamoto[1], Masahiro Sawada[1], Taichi Okuda[1]

[1]Hiroshima Unversity/ Research Institute for Synchrotron Radiation Science

P24

“USRP Implementation of Synchronized SS-CDMA Communications Function Using Wi-Wi: The Influence of Timing Offset in Broadband Environments”

Toshiki OUCHI[1], Serena AKASAKA[1], Masataka MIYAKE[1], Suguru KAMEDA[1]

[1]Research Institute for Semiconductor Engineering, Hiroshima University

P25

“Silicon Ion Implantation Conditions for highly doped n-GaN”

Iori Shinke[1], Hayato Kosaka[1], Jun-Ichi Tsuchimoto[2], Yoshiteru Amemiya[2], Akinobu Teramoto[1,2,3]

[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Research Institute for Semiconductor Engineering, Hiroshima University, [3]Research Institute for Synchrotron Radiation Science, Hiroshima University

P26

“Estimation of 1/f noise variation in MOSFETs”

Takuma Hamasaki[1], Tomomi Ishikawa[2], Akinobu Teramoto[1,2,3]

[1]Graduate School of Advanced Science and Engineering, Hiroshima University, [2]Research Institute for Semiconductor Engineering, Hiroshima University, [3]Research Institute for Synchrotron Radiation Science, Hiroshima University

P27

“Effect of Ammonia Plasma Treatment on Interface Properties of ALD SiO2/SiC MOS Capacitors”

An Li[1]

[1]Institute of Science Tokyo

P28

“Anisotropic Topological Surface State Bands Induced by Electron Confinement”

Ryohei Yamamoto[1,2], Kazuki Sumida[1,2], Yuita Fujisawa[1,2], Hitoshi Sato[1,2], Koji Miyamoto[1,2], Taichi Okuda[1,2]

[1]HiSOR, [2]Hiroshima University

P29

“Comparative Performance Analysis of OTFS and OFDM in High Doppler Shift Conditions for Q/V-Band LEO Satellite Communication”

Ryo Arimura[1], Masataka Miyake[1], Suguru Kameda[1]

[1]Research Institute for Semiconductor Engineering, Hiroshima University

P30

“Fundamental Investigation of Antenna Deployment Method in Antenna-Cluster-Centric Cell-Free Massive MIMO Systems”

Kazuya Ogata[1], Sijie Xia[1], Msataka Miyake[1], Suguru Kameda[1], Fumiyuki Adachi[2]

[1]Research Institute for Semiconductor Engineering, Hiroshima University, [2]International Research Institute of Disaster Science, Tohoku University

P31

“Bottom Electrode Material Selection for Ferroelectric AlScN Films”

Hitomi Hasegawa[1], Si-Meng Chen[1], Takuya Hoshii[1], Kazuo Tsutsui[2], Hitoshi Wakabayashi[2], Kuniyuki Kakushima[1]

[1]School of Engineering, Institute of Science Tokyo, [2]Institute of Integrated Research, Institute of Science Tokyo

P32

“Design Strategies for Consolidated Metal-Filled Layout in High-Frequency CMOS Integrated Circuits”

Yudai Miyoshi[1], Satoshi Tanaka[1], Takeshi Yoshida[1], Minoru Fujishima[1]

[1]Hiroshima University

P33

“Design of Broadband CMOS Differential Amplifier with Flat Gain Characteristics”

Koki Mochida[1], Satoshi Tanaka[1], Takeshi Yoshida[1], Shuhei Amakawa[1], Minoru Fujishima[1]

[1]Hiroshima University

P34

“Miniaturization and Broadband Operation of CMOS D-band Wilkinson Power Divider”

Leshan Xu[1], Satoshi Tanaka[1], Takeshi Yoshida[1], Minoru Fujishima[1]

[1]Graduate School of Advanced Science and Engineering, Hiroshima University

P35

“Design of Phase Shifter for 300 GHz Transceiver using 40nm CMOS”

Zhen Yan[1], Satoshi Tanaka[1], Takeshi Yoshida[1], Minoru Fujishima[1]

[1]Hiroshima University