List of Abstract

22PM1 session

22PM1-1 <**Plenary**> "Electronics-Inspired Interdisciplinary Research atToyohashi University of Technology"
Makoto Ishida (Toyohashi University of Technology, Japan)

22PM1-2 <**Plenary**> "Introduction to Research Activities at the University of Electro-Communications"
Wataru Mitsuhashi (The University of Electro-Communications, Japan)

22PM1-3 <**Invited**> "Review of recent developments in 'wet' high resolution electron microscopy"
Adarsh Sandhu, T. Takamura, C. Blanco-Andujar, J. Llandro, D. Ortega, Q. Pankhurst, P. Southern, M. Boutchich, K. Kobayashi, and E. Nakamura (The University of Electro-Communications, Toyohashi University of Technology, and Okayama University, Japan; University of Strasbourg, Pierre et Marie Curie University (UPMC), France; University of Cambridge, and University College London, UK; Campus Universitario de Cantoblanco, Spain)

22PM1-4 <**Invited**> "A Chip-based Platform for Cell Manipulation and Cellular Function Analysis"
Takayuki Shibata (Toyohashi University of Technology, Japan)

22PM2 session

22PM2-1 <**Invited**> "Development of DUV, UV, visible, IR ultrashort pulse lasers and their applications to carbon nanotubes and topological insulators"
Takayoshi Kobayashi (The University of Electro-Communications, Japan; National Chiao Tung University, Taiwan)

22PM2-2 <**Invited**> "Understanding the human color vision via steady state visual evoked potentials"
Shigeki Nakauchi (Toyohashi University of Technology, Japan)

22PM2-3 <**Invited**> "Earthquake prediction with electromagnetic phenomena"
Masashi Hayakawa (The University of Electro-Communications, Japan)

22PM2-4 "AlGaN/GaN-Based Heterostructure Field Effect Transistor-Type Biosensors"
Jang-Kyoo Shin and Hee-Ho Lee (Kyungpook National University, Korea)

22PM2-5 "Improvement of Cross-tension Strength Using Concave Electrode in Resistance Spot Welding of High-strength Steel Sheets"
Goro Watanabe, Tatsuyuki Amago, Yasuhiro Ishii, Hisaaki Takao, Toshiaki Yasui, and Masahiro Fukumoto (Toyota Central R and D Labs., Inc., and Toyohashi University of Technology, Japan)

23AM1 session

23AM1-1 <**Invited**> "Observing and controlling the quantum world with ultracold atoms"
Ken'ichi Nakagawa (The University of Electro-Communications, Japan)

23AM1-2 <**Invited**> "Chemistry on firefly bioluminescence"
Shojiro Maki (The University of Electro-Communications, Japan)

23AM1-3 "Heterogeneous Application With Virtualization Towards to the Resilient Server"
Idris Winarno, Takeshi Okamoto, Yoshikazu Hata, and Yoshiteru Ishida (Toyohashi University of Technology, and Kanagawa Institute of Technology, Japan)

23AM2 session

23AM2-1 <**Invited**> "Overview of Research at the University of Cambridge on Magnetism and Related Phenomena in 2D & 3D Materials and Metamaterials"
Justin Llandro, D. M. Love, C. Cimorra, and C. H. W. Barnes (University of Cambridge, UK)

23AM2-2 <**Invited**> "3D Integrated Micro/nanowires for Electrical, Chemical, Optical Neural Interfaces"
Takeshi Kawano (Toyohashi University of Technology, Japan)

23AM2-3 "Molecular Cotranscriptional Folding, A Novel Topic in the Theory and Applications of Self-Assembly"
Shinnosuke Seki (The University of Electro-Communications, Japan)

Graduate Student Session (GSS)

GSS1 "Oxygen reduction reaction on the basal plane of nitrogen-doped graphene: Effects of local arrangement of dopants"
Haruyuki Matsuyama, Akihide Ichikawa, Akira Akaishi, and Jun Nakamura (The University of Electro-Communications, JST-CREST, Japan)

GSS2 "Local structure analysis for diluted magnetic semiconducting Co and Al co-doped ZnO nanoparticles"
Kuminori Hyodo, Shota Morimoto, Takahiro Yamazaki, Tomoya Ishikawa, and Yuko Ichiyanagi (Yokohama National University, Japan)

GSS3 "Structure of Ti-Acetone Cluster Ions Studied by Time-of-Flight Reflectron Spectrometry"
Hidenori Iwasaki, Shota Shimokawara, and Yoshihiro Yamakita (The University of Electro-Communications, Japan)

GSS4 "Master-Slave Eye Robot System Driven by Ultrasonic Motors for Camera Operation"
Ayato Kanada, Tomoaki Mashimo, Tetsuto Minami, and Kazuhiko Terashima (Toyohashi University of Technology, Japan)

GSS5 "Metal Oxide CO_2 Sensor Integrated with Microhotplate for Low Power Operation"
Wei Ping Carine Soo, Tatsuya Iwata, Takeshi Hizawa, Makoto Ishida, and Kazuaki Sawada (Toyohashi University of Technology, Japan)

GSS6 "Basic evaluation of two-dimensional modulation code for optical correlator"
Kanami Ikeda, Suguru Wakita, and Eriko Watanabe (The University of Electro-Communications, Japan)

GSS7 "Improvement of Rooting of Chrysanthemum using Water Treated by Rod-to-Water Electrode Discharge"
Naoya Hayashi, Itaru Fujita, Sayo Okuda, Toru Harigai, Yoshiyuki Suda, and Hirofumi Takikawa (Toyohashi University of Technology, Japan)

GSS8 "Social Implementation of Social Media GIS to Support Warning and Evacuation at the Times of Heavy Rain Disaster"
Koji Nishimura and Kayoko Yamamoto (The University of Electro-Communications, Japan)

23PM session

23PM-1 "Preparations of Light Emitting Devices for Phototherapy Applications"
S. Lim, J. G. Jang, B. M. Park, and H. J. Chang (Dankook University, Korea)

23PM-2 <**Invited**> "The role and contribution of Kawasaki City Institute for Public Health (Local Public Health Laboratory), locally and globally"
Nobuhiko Okabe (Kawasaki City Institute for Public Health, Japan)

Poster session

P1 "Study on driving performance of flexible crawler system"
T. Kobayashi and K. Matsuda (National Institute of Technology, Tsuyama, College, Japan)

P2 "Prototyping and improvement of the driving characteristic of power assist lawn-mower robot"
Toshiro Kobayashi and Shotaro Hata (National Institute of Technology. Tsuyama College, Japan)

P3 "Prototyping of a power assisted lawn mower and sensing of obstacle on the ground and side wall"
T. Kobayashi and K. Nakahara (National Institute of Technology, Tsuyama, College, Japan)

P4 "Effect of pulsed LED lighting on the photosynthetic efficiency of strawberry variety 'Benihoppe' grown in an artificial light type plant factory"
Tadashi Kumazaki, Hiroshi Sakuma, Yoji Fujita, Kazutoshi Murakami, Tadashi Suzuki, Kai Li, and Masahiko Saigusa (Toyohashi University of Technology, Japan)

P5 "Design A Tomato Packing System by Image Processing and Optimization Processing"
Kai Li, Tadashi Kumazaki, and Masahiko Saigusa (Toyohashi University of Technology, Japan)

P6 "The establishment of droplet electroporation for cell transfection"
Rika Numano, Minako Matsuo, Naofumi Kimura, Hirofumi Kurita, and Akira Mizuno (Toyohashi University of Technology, Japan)

P7 "*Melanopsin* DNA aptamer to regulate the phase of circadian rhythms"
Shuhei Yamashita, Yo Kikuchi, and Rika Numano (Toyohashi University of Technology, and Waseda University, Japan)

P8 "Tautomeric reactions of DNA base pairs induced by radicals: *ab initio* molecular simulations based on density functional theory"
Naoko Okutsu, Kanako Shimamura, Eisuke Shimizu, Sergiy Shulga, Victor I. Danilov, and Noriyuki Kurita (Toyohashi University of Technology, Japan; National Academy of Science of Ukraine, Ukraine)

P9 "RNA template-directed RNA polymerization by T7 RNA polymerase"
Yasuhiro Kakimoto, A. Fujinuma, Y. Kikuchi, and S. Umekage (Toyohashi University of Technology, and Waseda University, Japan)

P10 "Fast and convenient evaluation of 5'-monophosphorylation of RNA transcript by using Phos-tag containing acrylamide gel electrophoresis"
Hiroumi Kurogi, Yo Kikuchi, and So Umekage (Toyohashi University of Technology, Japan)

P11 "RNA-seq analysis revealed expression profiles of the marine phototrophic bacterium *Rhodovulum sulfidophilum*"
Nobuyoshi Nagao, Yuu Hirose, So Umekage, and Yo Kikuchi (Toyohashi University of Technology, and Waseda University, Japan)

P12 "Principal Component Analysis Improves Patterning Characteristics with Lower Resolution from Data Obtained using Flow Cytometry"
Toshiyuki Takahashi (National Institute of Technology, Miyakonojo College, Japan)

P13 "Treatment of artificial dialysis wastewater using a microbial fuel cell packed with microbially reduced graphene oxide."
Yuko Goto and Naoko Yoshida (Chubu University, Nagoya Institute of Technology, and Toyohashi University of Technology, Japan)

P14 "Methane Production in a Thermophilic Anaerobic Digestion of Poly(L-lactic acid) after Pretreatment with High Pressure Steam at High Temperature"
Takeshi Yamada, Xiangqin Wu, Masaya Shimoda, Hiroyuki Daimon, Hideto Tsuji, and Akira Hiraishi (Toyohashi University of Technology, Japan)

P15 "Establishment of the Pipeline for High-throughput Determination of Complete Bacterial Genomes"
Yuu Hirose, Naomi Misawa, Sachiko Wakazuki, and Toshihiko Eki (Toyohashi University of Technology, Japan)

P16 "RNA interference approach to analyze functional role of a gene highly expressed in the symbiotic organ of the Asian citrus psyllid, Diaphorina citri "
Hiroki Dan and Atsushi Nakabachi (Toyohashi University of Technology, Japan)

P17 "Screening of proteins that potentially play pivotal roles in the aphid-*Buchnera* symbiosis"
Kei Onishi, Moriya Ohkuma, and Atsushi Nakabachi (Toyohashi University of Technology, Japan)

P18 "Differential Toxicity of a Novel Polyketide Diaphorin to Various Organisms"
T. Yamada, M. Hamada, A. Sugino, K. Okamura, and A. Nakabachi (Toyohashi University of Technology, Japan)

P19 "Biofilm formation behaviors of same metals in the magnetic fild"
S. Higuchi, T. Kubo, H. Kanematsu, H. Ikegai, T. Kogo, N. Hirai, and A. Ogawa (National Institute of Technology, Suzuka College, Japan)

P20 "Production and development of a new laboratory biofilm reactor to investigate biofilm behaviors in urinary system"
S. Kanesaki, H. Kudara, H. Kanematsu, H. Ikegai, T. Kogo, N. Hirai, and A. Ogawa (National Institute of Technology, Suzuka College, Japan)

P21 "Electrochemical Measurement in a Loop Type Laboratory Biofilm Reactor"
C. Kato, H. Kanematsu, H. Ikegai, T. Kogo, N. Hirai, and A. Ogawa (National Institute of Technology, Suzuka College, Japan)

P22 "Anomalous fluorescence emission at artificial lipid bilayer of partially fluorinated phosphatidylcholine"
Toshinori Motegi, Toshiyuki Takagi, Toshiyuki Kanamori, Masashi Sonoyama, and Ryugo Tero, (Toyohashi University of Technology, Advanced Industrial Science and Technology, Gunma University, and CREST, Japan)

P23 "Reconstruction of cell membrane fraction into artificial lipid bilayer system"
Kohei Fukumoto, Miyu Yoshida, Ayumi Hirano-Iwata, Michio Niwano, and Ryugo Tero (Toyohashi University of Technology, Tohoku University, and CREST, Japan)

P24 "Molecular orientation of voltage-dependent K^+ channel reconstructed to an artificial cell membrane system"
Yuya Suzuki, Akira Nozawa, Yuzuru Tozawa, and Ryugo Tero (Toyohashi University of Technology, Ehime University, Saitama University, and CREST, Japan)

P25 "Frictional behavior of Nanoscale Sliding for a SAM film"
Tomohiro Oyamada, Takuya Kobayashi, Junko Taniguchi, Masaru Suzuki, Naruo Sasaki, Makoto Ishikawa, and Kouji Miura (The University of Electro-Communications, and Aichi University of Education, Japan)

P26 "Surface Mapping of the Dynamic Friction and the Effective Elastic Stiffness"
Shohei Tanahara, Junko Taniguchi, Masaru Suzuki, Naruo Sasaki, Makoto Ishikawa, and Kouji Miura (The University of Electro-Communications, and Aichi University of Education, Japan)

P27 "Chemical modification of solid substrate surface by using water-soluble silane coupling agent"
Yuya Niiyama, Nobuo Misawa, and Ryugo Tero (Toyohashi University of Technology, CREST, Japan)

P28 "Conformational stabilization of graphene nanoflakes"
Makoto Ushirozako, Akira Akaishi, and Jun Nakamura (The University of Electro-Communications, Japan)

P29 "Growth of exoelectrogenic bacteria on graphene oxide"
Naoko Yoshida, Yasushi Miyata, Kasumi Doi, Yuko Goto, Yuji Nagao, Ryugo Tero, and Akira Hiraishi (Nagoya Institute of Technology, Toyohashi University of Technology, Nagoya Municipal Industrial Research Institute, and Chubu University, Japan)

P30 "Synthesis of monolayer and multilayer graphene on nickel catalyst film by thermal chemical vapor deposition using acetylene gas at 800°C"
K. Ichikawa, H. Akamatsu, and Y. Suda (Kobe City College of Technology, and Toyohashi University of Technology, Japan)

P31 "Investigation of catalyst and CVD condition for synthesis of multi-walled carbon nanocoils"
Tetsuo Iida, Yoshiyuki Suda, Toru Harigai, Hirofumi Takikawa, and Hitoshi Ue (Toyohashi University of Technology, and Tokai Carbon Co. Ltd., Japan)

P32 "Luminescence Properties of Ga-Doped ZnO Nanowires"
T. Nakane, T. Fujii and T. Ishiyama (Toyohashi University of Technology, Japan)

P33 "High-performance near-infrared phototransistors based on $MoSe_2$ nanosheets"
Pil Ju Ko, Tsukasa Takamura, Abdelkader Abderrahmane, and Adarsh Sandhu (The University of Electro-Communications, Toyohashi University of Technology, Japan; University of Science and Technology of Oran-Mohammed Boudiaf, Algeria)

P34 "Effects of poly(*N*-vinyl-2-pyrrolidone) capping agent during $Cu(OAc)_2$ reduction in $NaBH_4$/NaOH aqueous media"
Shun Nishimura, and Kohki Ebitani (Japan Advanced Institute of Science and Technology, Japan)

P35 "Fundamental Study on Nanofabrication Technique Based on Localized TiO_2 Photocatalytic Reaction"
Hiromi Furukawa, Naohiro Iio, Moeto Nagai, and Takayuki Shibata (Toyohashi University of Technology, Japan)

P36 "The flow channel width modification for balanced flow rate in a pyramidal microfluidic network chip"
Shunichi Higuchi, Hiroki Kakimoto, Yoshiki Takesako, Ryo Miyake, and Yuji Murakami (Toyohashi University of Technology, CREST, and The University of Tokyo, Japan)

P37 "Continuous monitoring of bowel sound and its relation to diet"
Daishi Kanazawa and Yuji Murakami (Toyohashi University of Technology, Japan)

P38 "Fabrication of through-silicon via silicon island arrays for high-density microneedle devices"
Yasuyuki Uraoka, Hideo Oi, Makoto Ishida, and Takeshi Kawano (Toyohashi University of Technology, Japan)

P39 "Vertically integrated platinum-clad/silicon dioxide-shell microtube arrays for optogenetic applications"
Tomoyuki Matsuo, Tomohiko Nakamura, Shota Yamagiwa, Hirohito Sawahata, Makoto Ishida, and Takeshi Kawano (Toyohashi University of Technology, Japan)

P40 "Highly efficient surface plasmon convertor using a metal-insulator-metal waveguide"
Yu Kimura, Yuya Ishii, and Mitsuo Fukuda (Toyohashi University of Technology, Japan)

P41 "High-precision microscopic phase-measurement system for multilayered cell sheets"
Natsumi Hara, and Eriko Watanabe (The University of Electro-Communications, Japan)

P42 "Smartphone-based Platform for Medical Diagnostics"
Ryoji Yukino, Jaiyam Sharma, Tsukasa Takamura, Joby Joseph, and Sandhu Adarsh (Toyohashi University of Technology, Japan; Indian Institute of Technology Delhi, India; The University of Electro-Communications, Japan)

P43 "Design of an innovative smartphone based spectrometer for medical diagnostics"
Jaiyam Sharma, Ryoji Yukino, Tsukasa Takamura, and Adarsh Sandhu (Toyohashi University of Technology, and The University of Electro-Communications, Japan)

P44 "Photosensitivity of multi-layered two dimensional GaSe nanosheets"
Shunji Ishizawa, Pil Ju Ko, Tsukasa Takamura, and Adarsh Sandhu (The University of Electro-Communications, and Toyohashi University of Technology, Japan)

P45 "Fundamental Study on Intracellular Imaging Based on Tip-enhanced Raman Spectroscopy"
Goh Miyazaki, Terutake Hayashi, Moeto Nagai, and Takayuki Shibata (Toyohashi University of Technology, and Kyushu University, Japan)

P46 "Bright-field Imaging by Fiber Bundle Endoscopy: Vertical reconstruction from multi-positional illumination"
Yoriko Ando, Kowa Koida, Hirohito Sawahata, Takashi Sakurai, Mitsuo Natsume, and Takeshi Kawano, Rika Numano (Toyohashi University of Technology, Juntendo University, and Denkosha, Japan)

P47 "Toyohashi probe: single whisker electrode block-module-devices"
Hirohito Sawahata, Shota Yamagiwa, Airi Moriya, Hideo Oi, Yoriko Ando, Rika Numano, Makoto Ishida, Kowa Koida, and Takeshi Kawano (Toyohashi University of Technology, Japan)

P48 “PDMS Molding using a Water Droplet”
Nobuo Misawa (Toyohashi University of Technology, Japan)

P49 “Resonant mass sensor using ring-shape PZT electrode toward a multimodal biosensor”
Hayato Ishida, Makoto Ishida, Kazuaki Sawada, and Kazuhiro Takahashi (Toyohashi University of Technology, Japan)

P50 “Sensitivity and Resonance Frequency with Changing a Diaphragm Diameter of Piezoelectric Micromachined Ultrasonic Transducers”
Daisuke Akai, Takeo Katori, Daisuke Takashima, and Makoto Ishida (Toyohashi University of Technology, Japan)

P51 “Quantitative assay to determine the efficacy of anti-cancer drugs to co-cultured glia and glioma using high-resolution acoustic impedance microscope”
Rahma Hutami Rahayu, Kenta Takahashi, Hikari Yamada, Agus Indra Gunawan, Kazuto Kobayashi, Seiji Yamamoto, Naohiro Hozumi, and Sachiko Yoshida (Toyohashi University of Technology, Japan)

P52 “A Novel Acetylcholine Release Electrochemical Device”
Itsuki Kageyama, Katsuki Yamada, Ryo Kato, Kazuaki Sawada, and Toshiaki Hattori (Toyohashi University of Technology, Japan)

P53 “Effects of growth temperature on crystalline quality of high nitrogen composition GaAsPN”
Kento Sato, Keisuke Yamane, Shun Mugikura, Hiroto Sekiguchi, Hiroshi Okada, and Akihiro Wakahara (Toyohashi University of Technology, Japan)

P54 “Harmonics Measurement for Nonlinear RF Components Based on Six-Port Technique”
K. Yamada, S. Sakihara, N. Sakai, and T. Ohira (Toyohashi University of Technology, Japan)

P55 “Investigation of surface treatment and passivation for GaN-based transistors”
Hiroshi Okada, Masatoshi Shinohara, Yutaka Kondo, Hiroto Sekiguchi, Keisuke Yamane, and Akihiro Wakahara (Toyohashi University of Technology, Japan)

P56 “380keV Proton Irradiation Induced Defects in p-type GaN: A combined EPR and Electrical Transport Study”
H. J. von Bardeleben, Uwe Gerstmann, H. Okada, S. Sato, and T. Ohshima (Université Pierre et Marie Curie, France; University of Paderborn, Germany; Toyohashi University of Technology, Japan Atomic Energy Agency, Japan)

P57 “First-principles study on locally disordered structures of the Mn-induced GaAs(001)-(2 x 2) surface”
Kenta Funatsuki, Akira Akaishi, and Jun Nakamura (The University of Electro-Communications, Japan)

P58 “Strain effect on the hole effective mass of GaSb: A first-priciples study”
Hideki Kishimoto, Takuya Hatayama, Akira Akaishi, and Jun Nakamura (The University of Electro-Communications, Japan)

P59 “Electronic structures and magnetic optical properties of metal phthalocyanine complexes”
Shintaro Baba, Atsushi Suzuki, and Takeo Oku (The University of Shiga Prefecture, Japan)

P60 “Theoretical NMR, IR / Raman Spectra of triple-decker phthalocyanines”
Atsushi Suzuki and Takeo Oku (The University of Shiga Prefecture, Japan)

P61 "Coordination Structures in $Sm^+(CH_3COCH_3)_n$, $Sm^+(CH_3OH)_n$ and $Sm^+(C_2H_5OH)_n$ Cluster Ions"
Shota Shimokawara, Hidenori Iwasaki, Koudai Saito, and Yoshihiro Yamakita (The University of Electro-Communications, Japan)

P62 "Measurement of p-wave contact in degenerate Fermi gas of ^{6}Li"
Jun Yoshida, Keita Hattori, Waseem Muhammad, Zhang Zhiqi, and Takashi Mukaiyama (The University of Electro-Communications, Japan)

P63 "Measurement of Charge-Exchange Collision Cross-Section between Li and Ca^+ in a Temperature Range of mK to K"
Ryoichi Saito, Shinsuke Haze, Mizuki Sasakawa, Kazuki Kyuno, and Takashi Mukaiyama (The University of Electro-Communications, Japan)

P64 "Electron Distributions of Substituted Anisole Analogues Studied by Highly-Sensitive Penning Ionization Electron Spectroscopy"
Yuki Ishiguro, Masahiro Ota, Yoshihiro Yamakita, and Naoto Hayashi (The University of Electro-Communications, and The University of Toyama, Japan)

P65 "Luminescent Single-Ion Magnets from Lanthanoid(III) Complexes with Monodentate Ketone Ligands "
Takuya Kanetomo and Takayuki Ishida (The University of Electro-Communications, Japan)

P66 "Study on Gd-O-N Angular Dependence of Magnetic Exchange Interaction in Gadolinium(III) Complexes Having Aliphatic Nitroxide Radicals"
Takeshi Nakamura, and Takayuki Ishida (The University of Electro-Communications, Japan)

P67 "Pyridine-2,6-diyl Dinitroxides as Room-Temperature Triplet Biradicals"
Hinako Kawakami, Asato Tonegawa, and Takayuki Ishida (The University of Electro-Communications, Japan)

P68 "Q-switched laser using magnetooptical garnet film"
Ryohei Morimoto, Taichi Goto, John Pritchard, Nicolaie Pavel, Takuya Yoshimoto, Hiroyuki Takagi, Yuichi Nakamura, Pang Boey Lim, Mani Mina, Takunori Taira, and Mitsuteru Inoue (Toyohashi University of Technology, and Institute for Molecular Science, Japan; Iowa State University, USA)

P69 "Fabrication and Photovoltaic Properties of ZnO Nanorods/Perovskite Solar Cells"
Yasuhiro Shirahata, Kohei Tanaike, Tsuyoshi Akiyama, Kazuya Fujimoto, Atsushi Suzuki, Jeyadevan Balachandran, and Takeo Oku (The University of Shiga Prefecture, Japan)

P70 "Low temperature fabrication of perovskite solar cells with TiO_2 nanoparticle layers"
Masato Kanayama, Takeo Oku, Atsushi Suzuki, Masahiro Yamada, Hiroki Sakamoto, Satoshi Minami, and Kazufumi Kohno (The University of Shiga Prefecture, Osaka Gas Co., and Osaka Gas Chemicals Co. Ltd., Japan)

P71 "Fabrication and characterization of perovskite solar cells"
Yuya Ohishi, Takeo Oku, and Atsushi Suzuki (The University of Shiga Prefecture, Japan)

P72 "Microstructure Analysis of Spherical Silicon Solar Cells with SnO_x:F layers"
Yasuhiro Shirahata, Takeo Oku, Youichi Kanamori, and Mikio Murozono (The University of Shiga Prefecture, and Clean Venture 21 Co., Japan)

P73 "Microstructures and photovoltaic properties of $CH_3NH_3PbI_3$-based perovskite-type solar cells"
Takeo Oku, Kohei Suzuki, Taishi Iwata, and Atsushi Suzuki (The University of Shiga Prefecture, Japan)

P74 "Role of halogen doping on the photovoltaic properties and microstructures of $CH_3NH_3PbI_3$ perovskite solar cells"
Atsushi Suzuki, Hiroshi Okada, and Takeo Oku (The University of Shiga Prefecture, Japan)

P75 "Evaluation of Photovoltaic Power Generation System Using Spherical Silicon Solar Cells and SiC-FET Inverter"
Taisuke Matsumoto, Takeo Oku, Kouichi Hiramatsu, Masashi Yasuda, Yasuhiro Shirahata, Akio Shimono, Yoshikazu Takeda, and Mikio Murozono (The University of Shiga Prefecture, Kyoshin Electric Co. Ltd., and Clean Venture 21 Co., Japan)

P76 "Construction and Evaluation of Photovoltaic Power Generation and Power Storage System using SiC-FET Inverter"
Takeo Oku, Taisuke Matsumoto, Koichi Hiramatsu, Masashi Yasuda, Yuya Ohishi, Akio Shimono, Yoshikazu Takeda, and Mikio Murozono (The University of Shiga Prefecture, Kyoshin Electric Co. Ltd., and Clean Venture 21 Co., Japan)

P77 "Observation of Parameters of Cloud Shadow on the Ground by Using Distributed Photodiodes and Pyranometer"
Ryohei Nomura, Amarsaikhan Bilguun, Yuki Kondo, Toru Harigai, Yoshiyuki Suda, and Hirofumi Takikawa (Toyohashi University of Technology, Japan)

P78 "Development of Simple Band-Spectral Pyranometer and Quantum Meter Using Photovoltaic Cells and Bandpass Filters"
Amarsaikhan Bilguun, Tetsushi Nakaso, Toru Harigai, Yoshiyuki Suda, and Hirofumi Takikawa (Toyohashi University of Technology, Japan)

P79 "Auger-type movable reactor for bio-oil production from forest cedar residuals –Concept and bio-oil properties–"
Shun Nishimura, and Kohki Ebitani (Japan Advanced Institute of Science and Technology, Japan)

P80 "Visually perspective taking affects neural responses of empathy for pain"
Shodai Sasaki, Shoji Itakura, and Michiteru Kitazaki (Toyohashi University of Technology, Kyoto University, Japan)

P81 "Channel selection for Brain Signal Classification by Correlated and Penalized Automatic Relevance Determination"
Reo Togashi and Yoshikazu Washizawa (The University of Electro-Communications, Japan)

P82 "'Motion Voice Synthesizer' Road to New Human-Computer Interface –The 1st step: Mouth Motion Analysis Tool Development–"
Hideo Oi (Toyohashi University of Technology, Japan)

P83 "Integrated recording system for behavioral neuroscience: using a synchronized Matlab-Psychtoolbox-TDT on a Single PC"
Kowa Koida, Koji Tanaka, Hiroshi Yamada, and Mitsuhiro Edamura (Toyohashi University of Technology, and University of Tsukuba, Japan)

P84 "Evaluation of Retinal Spatial Sensitivity in Cyprinid Fish"
Tetsuhiro Harimoto, Nilton Liuji Kamiji, and Shiro Usui (Toyohashi University of Technology, and RIKEN, Japan)

P85 "Development and observation of mice that express fluorescent protein-tagged neuropeptide Y in suprachiasmatic nucleus "
R. Nagai, T. Tsuboi, and R. Numano (Toyohashi University of Technology, and The University of Tokyo, Japan)

P86 "Functional analysis of new light-activated glutamate receptor using calcium imaging"
Shun Hisano and Rika Numano (Toyohashi University of Technology, Japan)

P87 "Developmental alteration with administration of valproate enhanced neuronal activities in the juvenile cerebellar cortex"
Saki Iwamoto, Daiki Katsumata, Yukiko Fueta, Susumu Ueno, Yuko Sekino, Naohiro Hozumi and Sachiko Yoshida (Toyohashi University of Technology, University of Occupational and Environmental Health, and National Institute of Health Science, Japan)

P88 "Observation of the alteration of neuronal activities in Valproate-administrated rat cerebellum using the enzyme-linked photo-assay"
Testuri Mikami, Sarii Nakajima, Yukiko Fueta, Susumu Ueno, Yuko Sekino, Naohiro Hozumi, and Sachiko Yoshida (Toyohashi University of Technology, University of Occupational and Environmental Health, and National Institute of Health Science, Japan)

P89 "Mathematical model of parallel-plate-pair wireless power transfer capacitive coupling coefficient"
Shinji Abe, Naoki Sakai, and Takashi Ohira (Toyohashi University of Technology, Japan)

P90 "Nonlinear Load Impedance Measurement System Exploiting Time-Domain Waveform and Möbius Transformation"
Sonshu Sakihara, Masaru Tanaka, Kyohei Yamada, Naoki Sakai, and Takashi Ohira (Toyohashi University of Technology, Japan)

P91 "Development of Dynamic Navigation System Considering Real-time"
Shun Fujita and Kayoko Yamamoto (The University of Electro-Communications, Japan)

P92 "AR Media GIS to Support Tourists' Excursion Behaviors"
Zhou Jiawen and Kayoko Yamamoto (The University of Electro-Communications, Japan)

P93 "Designing Dialogue Agents: Making Agents Dialogue Natural by using Twitter"
Yu Yoshikawa, Ryunosuke Chiba, Yoshikazu Hata, and Yoshiteru Ishida (Toyohashi University of Technology, Japan)

P94 "Flicker Reduction for Motion JPEG 2000 Using Allpass-based Wavelets"
Yosuke Shiga and Xi Zhang (The University of Electro-Communications, Japan)

P95 "AR Sangaku: Designing Multiple Constrained Spheres"
Yoshiaki Fukumoto, Tensi Yanagimachi, Masatoshi Nozawa, Yoshikazu Hata, and Yoshiteru Ishida (Toyohashi University of Technology, Japan)

P96 "A Diagram Museum 2015.10: A TUT-KOSEN Cooperation Project"
Yuji Morita, Shigetaka Ikeno, Shota Takagi, Yoshikazu Hata, Takuyou Tamori, and Yoshiteru Ishida (Toyohashi University of Technology, and National Institute of Technology, Akita College, Japan)

P97 "*Ayatori* Guided by Augmented Reality: A Japanese Game"
Ken-ichi Tsushima, Dai Gemma, Tensi Yanagimachi, Yoshikazu Hata, and Yoshiteru Ishida (Toyohashi University of Technology, Japan)

P98 "Birthday Hojin (Square): Embedding Numbers in Hojin"
Yuki Tsuzuki, Ryota Kano, Ryo Ochiai, Yoshikazu Hata, and Yoshiteru Ishida (Toyohashi University of Technology, Japan)

P99 "Fabrication and characterization of perovskite-type solar cells with Nb-doped TiO_2 layers"
J. Saito, T. Oku, A. Suzuki, and T. Akiyama (The University of Shiga prefecture, Japan)

Exhibition "Efforts of Tahara City Low-carbon Greenhouse Horticulture Convention ==Report of Demonstration in 2014=="