

List of Abstract

01AM1 session

01AM1-1 <Invited 1>"Publishing in Science – from the inside out"
Ian S. Osborne (Science Magazine, UK)

01AM1-2 <Invited 2>"Oxide Surface Protonics: Proton Activity on Hydrated Oxide Surface"
Shu Yamaguchi (University of Tokyo, Japan)

01AM1-3 <Invited 3>"Towards Smart Applications Using Temperature Gradients"
Simone Wiegand (Forschungszentrum Juelich GmbH, Germany)

PPS (Premium Poster Session)

PPS1 "Integration of self-assembled polymer nano- and microstructures into opto-electronic devices"
T. Anzai, T. Takumi, C. Botta, U. Giovanella, F. Galeotti, and V. Vohra (The University of Electro-communications, Japan; Istituto per lo Studio delle Macromolecole (ISMAC-CNR), Italy)

PPS2 "Mass Production of Nanosheets Using R2R and Its Evaluation"
Y. Sunami, Y. Kai, K. Tsuchiya, Y. Okamura, and H. Hashimoto (Tokai University, Japan)

PPS3 "Inducing photon-photon interaction with ultracold atoms in an optical cavity"
H. Tanji-Suzuki, N. Yamazaki, A. Sakurai, and Y. Matsuyama (The University of Electro-communications, Japan)

PPS4 "Photo-Assisted Anodic Electrodeposition of Tungsten Oxide Thin Films"
J. Sasano, T. Sakai, K. Nishiyama, S. Yokoyama, and M. Izaki (Toyohashi University of Technology, Japan)

PPS5 "Development of A Wideband Heterodyne Receiver for Radio Astronomy"
T. Sakai, H. Yamaya, K. Takagi, T. Kojima, A. Gonzales, S. Asayama, W. Shan, and T. Noguchi (The University of Electro-Communications, National Astronomical Observatory of Japan, Japan)

PPS6 "Formaldehyde Gas Sensing by Amine Contained PMMA Nanofiber"
R. Kato, Y. Ishii, and T. Hattori (Toyohashi University of Technology, Japan)

PPS7 "Materials for sEMG Sensor Used in Daily Life to Control Prosthetic Hand"
Y. Jiang, Y. Murai, S. Togo, Y. Yabuki, and H. Yokoi (The University of Electro-communications, Japan)

PPS8 "Fabrication of Biocompatible Polymer Nanosheets for Biomedical Applications"
Y. Okamura, and H. Zhang (Tokai University, Japan)

PPS9 "Interface Engineering of Colloidal Quantum Dot-based Solar Cells for Improving the Energy Conversion Efficiency"
Q. Shen, Y. H. Zhang, C. Ding, F. Liu, N. Nakazawa, S. Ozu, Y. Kitabatake, K. Katayama, and T. Toyoda (The University of Electro-Communications, Chuo University, Japan)

01GSS (Graduate Student Session)

- GSS1-1 "Synthesis of multifunctional clustered nano-Fe₃O₄ chitosan nanocomposite for biomedical applications"
M. E. Villamin, and Y. Kitamoto (Tokyo Institute of Technology, Japan)
- GSS1-2 "Effects of introduced functionalities on fluorescence and binding properties of Thioflavin T"
Y. Kataoka, H. Fujita, and M. Kuwahara (Gunma University, Japan)
- GSS1-3 "Synthesis of N-Hydroxysuccinimide from Succinic Acid and Hydroxylammonium Chloride using Reusable Solid Base Catalyst"
S. L. Dinh, S. Nishimura, and K. Ebitani (Japan Advanced Institute of Science and Technology, Japan)
- GSS1-4 "Unexpected Complexes from meta-Phenylene Bis(tert-butyl Nitroxides) and Gadolinium(III) 1,1,1,5,5,5-Hexafluoropentane-2,4-dionate"
H. Sekine, and T. Ishida (The University of Electro-Communications, Japan)
- GSS1-5 "Study on Liquid-phase Detection of Analytes with Fe₃O₄ Nanorods"
K. Yasuda, and Y. Kitamoto (Tokyo Institute of Technology, Japan)
- GSS1-6 "Influence of relaxation time distribution of ferrofluid to magnetic harmonic signal"
S. Oda, and Y. Kitamoto (Tokyo Institute of Technology, Japan)
- GSS1-7 "Substituent Effect in Spin-Crossover Behavior of Pybox-iron(II) Complexes (Pybox = 2,6-Bis(oxazolin-2-yl)pyridine)"
A. Kimura, and T. Ishida (The University of Electro-Communications, Japan)
- GSS1-8 "Study on acoustic effect of magnetic fluids stimulated by applying alternating magnetic fields"
M. Nakanishi¹, and Y. Kitamoto (Tokyo Institute of Technology, Japan)
-

01PM1 session

- 01PM1-1 <Invited 4>"New Piezoelectric and Thermoelectric Materials"
Jing-Feng Li (Tsinghua University, China)
- 01PM1-2 <Invited 5>"Novel Fabrication Process of Advanced Composite Materials via Electrostatic Adsorption Assembly Technique"
Hiroyuki Muto (Toyohashi University of Technology, Japan)
- 01PM1-3 <Invited 6>"Interdisciplinary Research Around Material Sciences: Trend From Bibliometric Analysis"
Fumitaka Yanagisawa (Clarivate Analytics, Japan)

01PM1-4 <Invited 7>"A Secret and Sophisticated Japanese Food Tradition, Koji"
Hiroshi Konno (Akita Konno Co., Ltd., Japan)

01PM1-5 <Invited 8>"CYBORG INSECT: Insect-Computer Hybrid Machine for Flight
and Walking Control"
Hirotaka Sato (Nanyang Technological University, Singapore)

02AM1 session

02AM1-1 <Invited 9>"Production of the Cocoons Containing Recombinant Silks:
Regulation and Realization"
Shuichiro Tomita (National Agriculture and Food Research Organization,
Japan)

02AM1-2 <Invited 10>"Maglev and Superconducting Technology"
Ken Nagashima (Railway Technical Research Institute, Japan)

02AM1-3 <Invited 11>"Fabrication of PZT Thin Film Actuator and Microneedle pH
Sensor by RF Magnetron Sputtering Method"
Kazuyoshi Tsuchiya (Tokai University, Japan)

02AM2 session

02AM2-1 <Contributed Talk 1>"Bioactivities in the Tamarind seed extracts – a
preliminary study"
S. Garg, T. Muangman, H. Huifu, L. Ling, S. Kaul, and R. Wadhwa
(National Institute of Advanced Industrial Science and Technology,
University of Tsukuba, Japan; Thailand Institute of Scientific and
Technological Research, Thailand)

02AM2-2 <Contributed Talk 2>"Improvement of Solar Cell Characteristics by Using
Quantum-Dot Superlattice Prepared by Sedimentation Method"
Y. Ishida, and K. Mukai (Yokohama National University, Japan)

02AM2-3 <Contributed Talk 3>"Single Quantum Dots on an Optical Nanofiber at
Cryogenic Temperature"
K. M. Shafi, W. Luo, R. R. Yalla, M. Morinaga, K. Hakuta, K. Iida, E.
Tsutsumi, and A. Miyanaga (University of Electro-Communications, NS
Materials Inc., Japan)

02AM2-4 <Contributed Talk 4>"Study of Carrier Behavior in Organic–Inorganic
Hybrid Perovskite Materials by using Optical Spectroscopic Method"
L. L. Y. Win, T. Manaka, and M. Iwamoto (Tokyo Institute of Technology,
Japan)

02GSS (Graduate Student Session)

GSS2-1 "Convolutional neural network based video identification system for content
management system with optical correlator"
R. Usami, H. Suzuki, K. Ikeda, and E. Watanabe (University of Electro-
Communications, Japan)

- GSS2-2 "Gas-imaging system "Sniff-cam" based on pH-dependent redox reactions of alcohol dehydrogenase for ethanol and acetaldehyde after drinking"
K. Iitani, T. Sato, K. Toma, T. Arakawa, and K. Mitsubayashi (Tokyo Medical and Dental University, Japan)
- GSS2-3 "Formation of adequate donor-acceptor vertical concentration gradients in polymer solar cell active layers"
S. Inaba, and V. Vohra (The University of Electro-Communications, Japan)
- GSS2-4 "Effects of CsBr on the performance of $\text{CH}_3\text{NH}_3\text{PbI}_{3-x}\text{Cl}_x$ -based solar cells"
N. Ueoka, T. Oku, A. Suzuki, H. Sakamoto, M. Yamada, S. Minami, and S. Tsukada (The University of Shiga Prefecture, Osaka Gas Co., Ltd., Osaka Gas Chemicals Co., Ltd., Japan)
- GSS2-5 "Fabrication of NIR-Responsive $\text{NaYF}_4:\text{Yb,Tm}$ /anatase TiO_2 Composite Aerogel"
F.-C. Li, and Y. Kitamoto (Tokyo Institute of Technology, Japan)
- GSS2-6 "Structural stability of the Se-treated GaAs(111)B surface"
S. Goto, A. Ohtake, A. Akaishi, and J. Nakamura (The University of Electro-Communications, National Institute for Materials Science (NIMS), Japan)
- GSS2-7 "Softly-confined water cluster between free standing graphene sheets"
R. Agustian, A. Akaishi, and J. Nakamura (The University of Electro-Communications, CREST, Japan Science and Technology Agency, Japan)
- GSS2-8 "Preparation of Graphite Dispersed Copper Composite on Copper Plate with CO_2 Laser"
S. Yokoyama, Y. Ishikawa, M. N. A. Muizz, M. N. N. Hisyamudin, K. Nishiyama, J. Sasano, and M. Izaki (Toyohashi University of Technology, Japan; Universiti Tun Hussein Onn Malaysia, Malaysia)
- GSS2-9 "Oriented conjugated polymer films with polarized photoluminescence properties."
T. Anzai, and V. Vohra (The University of Electro-Communications, Japan)

02PM1 session

- 02PM1-1 <Invited 12>"Polymers and Water Processed Polymeric Nanoparticles as Materials for Solution Manufacturing of Optoelectronic and Electronic Devices"
Silvia Destri (Istituto per lo Studio delle Macromolecole del Consiglio Nazionale delle Ricerche, Italy)
- 02PM1-2 <Invited 13>"Novel Superfluid Response of 4He Confined in One-Dimensional Nanotube"
Junko Taniguchi (University of Electro-Communications, Japan)
- 02PM1-3 <Contributed Talk 5>"On Autonomous Driving: LIDAR Based Mapping and Localization Systems (Problems and Challenges)"
M. Aldibaja, N. Suganuma, and K. Yoneda (Kanazawa University, Japan)

Session: Diversity in academia and industry

- D1 <Invited 14>"The Innovation and Diversity"
Zane Zumbahlen (IBM Japan, Japan)
- D2 <Invited 15>"Must the Nail That Sticks Out Be Hammered In?
Diversity and Inclusion in the New Japan"
Janelle Sasaki (Ernst & Young Advisory & Consulting Co., Ltd., Japan)
- D3 <Invited 16>"We need a new leadership"
Miyoko Kojima (Ourshare Co., Ltd., Lifeshift Japan Co., Ltd., non profit
organization GEWEL, Japan)

Poster session

- P1 "Preparation of multilayer film consisted of hydrogen-free DLC and
nitrogen-containing DLC for conductive hard coating"
Y. Iijima, T. Harigai, R. Isono, T. Tanimoto, Y. Suda, H. Takikawa, M.
Kamiya, S. Kaneko, and S. Kunitsugu (Toyohashi University of Technology,
Itoh Optical Industrial Co., Ltd., Kanagawa Institute of Industrial Science
and Technology, Industrial Technology Center of Okayama Prefecture,
Japan)
- P2 "Electromagnetic wave absorption properties of carbon nanocoil composites"
Y. Suda, R. Matsuo, T. Yoshii, S. Yasudomi, T. Tanimoto, T. Harigai, H.
Takikawa, and T. Setaka (Toyohashi University of Technology, Tokai
Carbon Co., Ltd., Japan)
- P3 "Improvement of Adhesion of Hydrogen-Free DLC Film by Employing
Interlayer of Tungsten Carbide"
R. Isono, T. Tanimoto, Y. Iijima, S. A. Kusumawan, T. Harigai, Y. Suda, H.
Takikawa, M. Kamiya, S. Kaneko, and M. Taki (Toyohashi University of
Technology, Itoh Optical Industrial Co., Ltd., Kanagawa Institute of
Industrial Science and Technology, Onward Ceramic Coating Co., Ltd.,
Japan)
- P4 "Positive Effect of Acute Aerobic Exercise on the Executive Function: An
fMRI Study"
A. Kobayashi, A. Senoo, G. Fujita, N. Mizuguchi, T. Kamijo, K. Maruyama,
R. Takigawa, K. Ohkawara, and S. Ando (The University of Electro-
Communications, Tokyo City University, Keio University, Japan)
- P5 "Growth of ZnO Nanowires on FTO Films"
S. Kato, K. Ono, and T. Ishiyama (Toyohashi University of Technology,
Japan)
- P6 " $\text{Cu}_2\text{Sn}_{1-x}\text{M}_x\text{S}_3$ (M=Zn, Fe) Nanoparticles for Sustainable Thermoelectrics"
W. Zhou, C. Shijimaya, K. Higashimine, M. Ohta, M. Miyata, D. Mott, T.
Akatsuka, H. Ono, M. Koyano, and S. Maenosono (JAIST, AIST, Nippon
Shokubai Co., Ltd., Japan)

- P7 "Delamination of organic and metal thin films on PEN substrate"
T. Kobayashi, H. Okita, A. Yamaguchi, and Y. Utsumi (National Institute of Technology, Tsuyama College, University of Hyogo, Japan)
- P8 "Improvement of hierarchical motion compensation in 2D+t wavelet scalable video coding"
H. Hamada, and X. Zhang (The University of Electro-Communications, Japan)
- P9 "Investigation of Magnetic Separation Characteristics of Ag/FeCo/Ag Core/Shell/Shell Nanoparticles"
Y. Wang, M. Takahashi, D. Mott, and S. Maenosono (Japan Advanced Institute of Science and Technology, Japan)
- P10 "HDR Imaging from LDR Images with Motion by Estimating Shutter Speed"
A. Miyagawa, and X. Zhang (The University of Electro-Communications, Japan)
- P11 "Development of a Novel Continuous Track Mechanism Embedded Flexible Spikes for Weedy Ground Running Vehicle"
Y. Takayama, and K. Hosotani (NIT, Tsuyama College, Japan)
- P12 "Development of the Morphing Micro Water Generator Using Flow Induced Vibration from an Elastic Supported Transformable Rectangular Column"
K. Eguchi1, and K. Hosotani (NIT, Tsuyama College, Japan)
- P13 "Chemical Synthesis of Tetrahedrite Nanoparticles as Building Blocks for Sustainable Thermoelectrics"
T. Nakada, C. Shijimaya, M. Takahashi, W. Zhou, M. Ohta, D. Mott, T. Akatsuka, H. Ono, and S. Maenosono (JAIST, AIST, Nippon Shokubai Co., Ltd., Japan)
- P14 "Shell Thickness Dependence of Chemical State of Elements in Au@Ni Core@Shell Nanoparticles"
M. Hatsukano, M. Takahashi, P. Mohan, D. Mott, H. Niino, K. Suzuki, and S. Maenosono (Japan Advanced Institute of Science and Technology, Asahi Kasei Corp., Japan)
- P15 "Design of Two Channel Graph Filter Banks from Linear Phase FIR Filters"
S. Matsunaga, and X. Zhang (The University of Electro-Communications, Japan)
- P16 "Fabrication and Characterization of Perovskite-Type $\text{CH}_3\text{NH}_3\text{Pb}_{1-x}\text{Sb}_x\text{I}_{3-2x}\text{Br}_{3x}$ Photoelectric Devices"
J. Yamanouchi, Y. Ohishi, M. Fukaya, A. Suzuki, and T. Oku (The University of Shiga Prefecture, Japan)
- P17 "Photovoltaic properties of Sb_2S_3 sensitized solid state solar cells"
S. Fujino, T. Toyoda, S. Hayase, and Q. Shen (Univ. of Electro-Commun., Univ. of Kyushu-institute., Japan)

- P18 "Photovoltaic Properties of Quantum Dot Sensitized Inverse Opal TiO₂ Solar Cells with ZnS Passivation"
K. Hori, Y. Yoshihara, T. Toyoda, S. Hayase, and Q. Shen (The University of Electro-Communications, Kyushu Institute of Technology, Japan)
- P19 "Fabrication and magnetic control of polymer based soft nanorobot"
A. Abderrahmane, R. Yukino, K. Ambai, H. Tokuhara, H. Zhang, Y. Okamura, H. Kimura, R. Kita, and A. Sandhu (The University of Electro-Communications, Tokai University, Japan)
- P20 "Dependence of dissociation rate of multiple excitons in PbS quantum dot film on the distance between quantum dots"
N. Nakazawa, C. Jin, S. Hayase, T. Toyoda, and Q. Shen (Univ. Electro-commun., Kyushu Inst. Tech., JST CREST, Japan)
- P21 "Development of in-vitro experiment system of magnetic hyperthermia"
Y. Shiode, H. Yamashita, K. Fujiwara, T. Ide, S. Abo, Y. Miyato, Y. Ichiyanagi, and M. Abe (Osaka University, Yokohama National University, Japan)
- P22 "Development of compact fast pyrolysis reactor with Auger-type module technology to produce the liquid biofuel with high yield"
S. Nisimura, and K. Ebitani (Japan Advanced Institute of Science and Technology (JAIST), Japan)
- P23 "Fabrication and characterization of electrospun metal oxide supported poly-(m-phenylene isophthalamide) nanofiber"
K. Sugihara, R. Kato, and T. Hattori (Toyohashi University of Technology, Japan)
- P24 "The Influence of SILAR Techniques on PbS Quantum Dots for the Photovoltaic Properties"
P. Tusamalee, F. Liu, W. Yindeesuk, T. Toyoda, and Q. Shen (The University of Electro-communications, Japan; King Mongkut's Institute of Technology Ladkrabang, Thailand)
- P25 "Solid-state pH sensor module: to explore the possibilities of applications"
L. Zhang, H. Nogami, J. Lu, and, R. Maeda (National Institute of Advanced Industrial Science and Technology (AIST), Kyushu University, Japan)
- P26 "Rapid and sensitive detection of biotin with fluorescent nanoparticles and planar micro-coils"
J. Sharma, R. Yukino, T. Takamura, and A. Sandhu (University of Electro-Communications, Toyohashi University of Technology, Japan)
- P27 "Smartphone based fluorescence microscope for point of care testing biomedical diagnostics"
J. Sharma, H. Miyashita, T. Takamura, and A. Sandhu (University of Electro-Communications, Toyohashi University of Technology, Japan)
- P28 "Rietveld Refinement of the Crystal Structure of Perovskite Solar Cells Using CH₃NH₃Pb_{1-x}Sb_xI₃ and Other Compounds"
Y. Ando, Y. Ohishi, and T. Oku (The University of Shiga Prefecture, Japan)

- P29 "Study on Ductility of a Conductive Transparent Electrode for Flexible Organic Light Emitting Diode panel"
T. Kobayashi, Y. Kawasaki and H. Katazawa (Tsuyama Nat. College of Technol., Japan)
- P30 "Nano-layered MoSe₂ Based Near-Infrared Photodetector"
A. Abderrahmane, P. J. Ko, and A. Sandhu (The University of Electro-Communications, Japan; Chosun University, Republic of Korea)
- P31 "Tunable color filter using guided mode resonance structures"
R. Yukino, P. K. Sahoo, J. Sharma, T. Takamura, J. Joseph, and A. Sandhu (University of Electro-Communications, Toyohashi University of Technology, Japan; Indian Institute of Technology Delhi, India)
- P32 "Magnetic nanoparticle-based nano-grating guided-mode resonance biosensors"
R. Yukino, P. K. Sahoo, J. Sharma, T. Takamura, J. Joseph, and A. Sandhu (University of Electro-Communications, Toyohashi University of Technology, Japan; Indian Institute of Technology Delhi, India)
- P33 "Electrical Activation of Magnesium in AlGaN by UV Wet Oxidation"
X. Zhang, S. Nozaki, and K. Uchida (The University of Electro-Communications, Japan)
- P34 "Simulation of thermal deformation during molding with 3D printer"
T. Kobayashi, and J. Nishii (Tsuyama Nat. College of Technol., Japan)
- P35 "Reaction condition screening system for highly fluorescent CdSe nanocrystals"
H. Nakamura (National Institute of Advanced Industrial Science and Technologies, Japan)
- P36 "Simulation of a viscoelasticity membrane structure applied a dynamic load"
T. Kobayashi, K. Iga, and M. Yamamoto (National Institute of Technology, Tsuyama College, Hiroshima University, Japan)
- P37 "Effects of transition metal doping into perovskite crystals on electronic structures and magnetic properties for solar cell applications"
A. Suzuki, and T. Oku (The University of Shiga Prefecture, Japan)
- P38 "Tuning the dimensions of self-assembled porous structures for enhanced light in-coupling in organic photovoltaic devices"
T. Takumi, C. Botta, U. Giovanella, F. Galeotti, and V. Vohra (The University of Electro-communications, Japan; Istituto per lo Studio delle Macromolecole (ISMAC-CNR), Italy)
- P39 "Chemical loading of nano-sized particles onto magnetotactic bacteria"
T. Takamura, A. Arakaki, and A. Sandhu (Toyohashi University of Technology, Tokyo University of Agriculture and Technology, University of Electro-Communications, Japan)

- P40 "Hole blocking effect of C₆₀-ethylenediamine adduct on organic thin-films solar cells"
A. Yamada, T. Akiyama, D. Izumoto, A. Suzuki, and T. Oku (The University of Shiga Prefecture, Japan)
- P41 "Structural Study on Metal and Halogen Ions Substituted CH₃NH₃PbI₃-based Perovskite Crystals for Solar Cells"
H. Tanaka, N. Ueoka, and T. Oku (The University of Shiga Prefecture, Japan)
- P42 "Relationship between Stability and Aromaticity of Graphene Nanoflakes"
A. Akaishi, M. Ushirozako, H. Matsuyama, and J. Nakamura (The University of Electro-Communications, Japan Science and Technology Agency, Japan)
- P43 "Potential engineering on design guidelines for CNT motor depending on outer CNT length"
K. Yamasaki, K. Miura, and N. Sasaki (The Univ. Electro-Commun., Aichi Univ. Educ., Japan)
- P44 "Bioactivities in the Grape seed extract - a preliminary study"
T. Muangman, H. Huifu, S. Garg, L. Ling, R. Wadhwa, and S. Kaul (Thailand Institute of Scientific and Technological Research, Thailand; National Institute of Advanced Industrial Science and Technology, University of Tsukuba, Japan)
- P45 "Nanomechanics of the compression process of C₆₀ molecular bearings"
S. Komiyama, M. Sugimoto, H. Sakurai, K. Miura, and N. Sasaki (Univ. Electro-Commun., Kumamoto Univ., Osaka Univ., Aichi Univ. Educ., Japan)
- P46 "Fabrication and Characterization of FA-added perovskite solar cells"
M. Kato, A. Suzuki, Y. Ohishi, and T. Oku (The University of Shiga Prefecture, Japan)
- P47 "Quantitative evaluation of misaligned Magneto-Optical Trap by Monte Carlo simulation"
S. Itoo, and T. Kishimoto (University of Electro-Communications, Japan)
- P48 "A 150 W SiC Photovoltaic Inverter with a State-of-the-Art Compactness"
Y. Ando, T. Oku, M. Yasuda, K. Ushijima, H. Matsuo, and M. Murozono (The University of Shiga Prefecture, U. Design, Micro Vehicle Lab., Ltd., Clean Venture 21 Co., Japan)
- P49 "Gray Molasses cooling of ⁸⁷Rb with 5S_{1/2}-6P_{1/2} transition"
N. Kodama, and T. Kishimoto (University of Electro-Communications, Japan)
- P50 "Cell based assays for manipulation of skin pigmentation"
W. Jia, L. Ling, N. Ando, C. Mahe, S. Kaul1, and R. Wadhwa (National Institute of Advanced Industrial Science & Technology (AIST), University of Tsukuba, KK Chanel Research & Technology Development Laboratory, Japan)

- P51 "Fabrication and Characterization of Organic-Inorganic Perovskite Photovoltaic Devices"
H. Tanaka, Y. Ohishi, and T. Oku (The University of Shiga Prefecture, Japan)
- P52 "Fabrication and characterization of perovskite solar cells added with transition metal elements"
M. Taguchi, A. Suzuki, and T. Oku (The University of Shiga Prefecture, Japan)
- P53 "Sensing system for an Autonomous Gardening vehicle Equipped with a cleaning Robot"
T. Kobayashi, and R. Sumi (National Institute of Technology, Tsuyama College, Japan)
- P54 "Effect of edge structures on the oxygen reduction reaction activity of nitrogen-doped graphene nanoribbons"
S. Gomi, H. Matsuyama, A. Akaishi, and J. Nakamura (The University of Electro-Communications, JST-CREST, Japan)
- P55 "Tune-out wavelength spectroscopy for ^{87}Rb atoms with thermal vapor cell"
W. Okamoto, and T. Kishimoto (University of Electro-Communications, Japan)
- P56 "Fabrication and characterization of perovskite solar cells with surfactants additives"
J. Nomura, Y. Ohishi, A. Suzuki, and T. Oku (The University of Shiga Prefecture, Japan)
- P57 "Load Dependence of Superlubricity of Fullerene Molecular Bearings"
T. Narita, M. Sugimoto, H. Sakurai, K. Miura, and N. Sasaki (The Univ. Electro-Commun., Kumamoto Univ., Osaka Univ., Aichi Univ. Educ., Japan)
- P58 "Anticancer activity in Honey propolis: Bioinformatics and experimental evidence to mechanism of action of active components, CAPE and Artepillin C"
P. Bhargava, A. Kaul, Y. Ishida, K. Terao, S. C Kaul, and R. Wadhwa (National Institute of Advanced Industrial Science & Technology (AIST), University of Tsukuba, CycloChem Co., Ltd., Japan)
- P59 "5'-Aza-2'-deoxycytidine is a multi-target drug: bioinformatics and experimental evidence"
J. Putri, Y. Yu, A. N. Sari, K. Sakamoto, N. Widodo, S. C Kaul, and R. Wadhwa (National Institute of Advanced Industrial Science & Technology (AIST), University of Tsukuba, Japan; Brawijaya University, Indonesia)
- P60 "Optical Nanofiber Cavity For Quantum Photonics"
J. Keloth, K. P. Nayak, J. Wang, and K. Hakuta (University of Electro-Communications, Japan)
- P61 "Energy analysis of mechanism of slip motion of C_{60} molecular bearings"
R. Ogawa, M. Suzuki, K. Miura, and N. Sasaki (Univ. Electro-Commun., Aichi Univ. Educ., Japan)

- P62 "Fabrication and characterization of perovskite type solar cells using phthalocyanine and naphthalocyanines as hole-transporting materials"
H. Okumura, A. Suzuki, Y. Yamasaki, and T. Oku (The University of Shiga Prefecture, Orient Chemical Industries Co. Ltd., Japan)
- P63 "Design of a Photofragment Velocity-Map Imaging Spectrometer for Mass-Selected Cluster Ions"
K. Saito, S. Shimokawara, H. Iwasaki, and Y. Yamakita (The University of Electro-Communications, Japan)
- P64 "Effects of halide addition to arsenic-doped perovskite photovoltaic devices"
T. Hamatani, and T. Oku (The University of Shiga Prefecture, Japan)
- P65 "Effects of compound addition to perovskite-type photovoltaic devices"
T. Oku, and Y. Ohishi (The University of Shiga Prefecture, Japan)
- P66 "Sonochemical Synthesis of Magnetic Nanoparticles"
S. Uchiyama, H. Miyashita, T. Ishida and S. Hatanaka (The University of Electro-Communications, Japan)
- P67 "Evaluation of Real Contact Area on Atomic-Scale Peeling of Graphene"
S. Ohmuki, T. Ando, N. Itamura, K. Miura, and N. Sasaki (The Univ. Electro-Commun., Seikei Univ., Aichi Univ. Educ., Japan)
- P68 "Formation of Elongated Phase Separation Domains in Spin-Cast Polymer Blend Thin Films"
H. Zhang, and Y. Okamura (Tokai University, Japan)
- P69 "Effect of Acetylation Degree on Thermal Diffusion Behavior of Dextran"
I. Dueramae, M. Yoneyama, N. Shinyashiki, S. Yagihara, and R. Kita (Tokai University, Gunma University, Japan)
- P70 "Tuning of Guided Mode Resonance wavelength by azimuthal rotation"
P. K. Sahoo, J. Sharma, R. Yukino, A. Sandhu, and J. Joseph (Indian Institute of Technology Delhi, India; University of Electro-Communications, Japan)
- P71 "Vibro-tactile Perception by Finger-mounted Accelerometer for in-vivo Active Touch"
S. Zhang, T. Li , and Y. Sunami (Tokai University, Japan)
- P72 "Streamlined Vessels for Speedboats: Macro Modifications of Shark Skin Design Applications"
M. D. Ibrahim, S. N. A. Amran, A. Zulkharnain, and Y. Sunami (Universiti Malaysia Sarawak, Malaysia; Tokai University, Japan)
- P73 "A Viscosity Control Method of PDMS for Microfluidic Devices and Its Applications"
S. Yokoyama, and H. Kimura (Tokai University, Japan)

- P74 "Preparation of Nutritious Water for Plant Growth Using Spark-Plug Discharge"
T. Nakaso, S. A. Kusumawan, T. Shimomura, T. Harigai, Y. Suda, H. Takikawa, and K. Kawano (Toyohashi University of Technology, National Institute of Technology, Oita College, Japan)
- P75 "Challenges for Diversity Environment in the University of Electro-Communications"
M. Habazaki, and K. Yura (The University of Electro-Communications, Japan)
- P76 "We need a new leadership"
M. Kojima (Ourshare Co., Ltd., Lifeshift Japan Co., Ltd., non profit organization GEWEL, Japan)
- P77 "Seiko Gakuin High School: A Proud SSH"
R. Nakayama, T. Satoh, and S. Hijikata (Seiko Gakuin High School, Japan)