

List of Poster Presentations

Poster Presentations

Odd numbers: November 7 (Wed) 13:15-14:45
Even numbers: November 8 (Thu) 13:05-14:35

P001 Efficient preparation of small single-stranded DNA rings with stable secondary structures

Yixiao Cui, Xutiange Han, Ran An, Yaping Zhang, Xingguo Liang, Makoto Komiyama
College of Food Science and Engineering, Ocean University of China

P002 Topologically constrained formation of stable left-handed DNA structure under physiological conditions

Zhang Yaping, Ran An, Yixiao Cui, Makoto Komiyama, Xingguo Liang
College of Food Science and Engineering

P003 Synthesis of various furanoid glycal derivatives and their use as stimuli-responsive tools by precise control of their decomposition to furan derivatives

Yoshiaki Kitamura¹⁾²⁾, Koki Terazawa²⁾, Yuki Nagaya³⁾, Ryo Asakura²⁾, Katsuki Tanaka²⁾, Masato Ikeda¹⁾²⁾³⁾, Yukio Kitade¹⁾⁴⁾

1) Faculty of Engineering, Gifu University, 2) Graduate School of Engineering, Gifu University, 3) United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, 4) Faculty of Engineering, Aichi Institute of Technology

P004 Development of an unnatural nucleic acid base pair with “*anti-syn*” like glycosidic conformation

Yuya Moriyama¹⁾²⁾, Kunihiko Morihiko¹⁾, Akimitsu Okamoto¹⁾²⁾

1) Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo, 2) Research Center for Advanced Science and Technology, The University of Tokyo

P005 Formation of a stable 1,3,9-triaza-2-oxophenoxazine self-base pair mediated by silver(I) ions

Akane Fujii, Yuki Kishimoto, Yusuke Nakatsuji, Natsumi Nozaki, Osamu Nakagawa, Satoshi Obika
Graduate School of Pharmaceutical Sciences, Osaka University

P006 Solid-phase synthesis of phosphate/boranophosphate (PO/PB) chimeric oligodeoxyribonucleotides by the *H*-boranophosphonate-*H*-phosphonate method

Hiroki Imai¹⁾, Tomohito Shuto²⁾, Rintaro Hara¹⁾³⁾, Kazuki Sato¹⁾, Takeshi Wada¹⁾

1) Graduate School of Pharmaceutical Sciences, Tokyo University of Science, 2) Graduate School of Frontier Sciences, The University of Tokyo, 3) Graduate School of Medical and Dental Sciences

P007 Post-synthetic conversion of 5-trifluoromethylpyrimidine bases within oligonucleotides

Yuta Ito, Misaki Matsuo, Kazuki Yamamoto, Wakana Yamashita, Takashi Osawa, Yoshiyuki Hari
Faculty of Pharmaceutical Sciences, Tokushima Bunri University

P008 Synthesis of 7-deazaguanosine Derivatives

Natsuhisa Oka¹⁾²⁾, Kouki Nakano¹⁾, Akane Fukuta¹⁾, Ayumi Mori¹⁾, Kaori Ando¹⁾

1) Department of Chemistry and Biomolecular Science, Faculty of Engineering, Gifu University, 2) Center for Highly Advanced Integration of Nano and Life Sciences, Gifu University (G-CHAIN)

P009 Comparison of Biophysical and Biological Properties of (S) -Benzene-Glycol Nucleic Acid (BGNA) and (R) -BGNA

Yuki Nakamura¹⁾, Nazuki Niwa²⁾, Yusuke Maeda³⁾, Taiichi Sakamoto⁵⁾, Yoshihito Ueno¹⁾²⁾³⁾⁴⁾

1) Department of Life science and Chemistry, the Graduate School of Natural Science and Technology, Gifu University, 2) Graduate School of Applied Biological Science, Gifu University, 3) Faculty of Applied Biological Science, Gifu University, 4) Center of Highly Advanced Integration of Nano and Life Science, Gifu University (G-CHAIN), 5) Faculty of Advanced Engineering, Chiba Institute of Technology

P010 Synthesis and Properties of Oligonucleotides Including 4'-C-aminomethyl-2'-deoxy-2'-F-arabinonucleoside

Tatsuya Tsuchihira¹⁾, Yusuke Maeda²⁾, Yoshihito Ueno¹⁾²⁾³⁾⁴⁾

1) Department of Life Science and Chemistry, Graduate School of Natural Science and Technology, Gifu University, 2) Faculty of Applied Life Sciences, Gifu University, 3) The United Graduate School of Agricultural Science, Gifu University, 4) Center for Highly Advanced Integration of Nano and Life Sciences (G-CHAIN), Gifu university

P011 Synthesis and evaluation of 7,8-disubstituted 7-deazad-dGTP derivatives as hMTH1 inhibitors

Hui Shi, Zhen Yi Yin, Shigeki Sasaki, Yosuke Taniguchi

Graduate School of Pharmaceutical Sciences, Kyushu University

P012 Hypoxia-Triggered Activation of Anticancer Drug via Selective Azo Reduction

Takuro Ishinabe¹⁾, Kunihiko Morihiko¹⁾, Akimitsu Okamoto¹⁾²⁾

1) Department of Chemistry and Biotechnology, Graduate School of Engineering, the University of Tokyo, 2) RCAST, the University of Tokyo

P013 Development of C-nucleoside analogues for a TA base pair recognition in antiparallel triplex DNA

Takayuki Osuki, Yosuke Taniguchi, Yuya Magata, Shigeki Sasaki

Graduate School of Pharmaceutical Sciences, Kyushu University

P014 Synthesis and properties of oligonucleotides including 2'-C,4'-C-methyleneoxy-bridged thymidines

Takashi Osawa¹⁾, Han Kim¹⁾, Misa Shoji¹⁾, Masakazu Dohi²⁾, Yuta Ito¹⁾, Satoshi Obika²⁾, Yoshiyuki Hari¹⁾

1) Faculty of Pharmaceutical Sciences, Tokushima Bunri University, 2) Graduate School of Pharmaceutical Sciences, Osaka University

P015 Synthesis and properties of cyclic oligonucleotides containing acyl groups at the 5'- and 3'- terminal sites

Ritsu Hashimoto¹⁾, Shuhei Nishizawa¹⁾, Yu Miyake¹⁾, Takashi Kanamori¹⁾, Hideya Yuasa¹⁾, Akihiro Ohkubo¹⁾²⁾

1) Department of Life Science and Technology, School of Life Science and Technology, Tokyo institute of technology, 2) CREST, Japan Science and Technology Agency (JST)

P016 Creation of a puDDD: pyAAA H-bonding base pair in DNA oligonucleotide

Koki Matsumoto, Noriko-Saito Tarashima, Noriaki Minakawa

Graduate School of Pharmaceutical Science, Tokushima University

P017 Development of photo-cross-linkable ODN equipped with 3-cyanovinylcarbazole tethered by carbon linker based on click chemistry

Kenta Ishida, Li Xue, Shigetaka Nakamura, Kenzo Fujimoto

Japan Advanced Institute of Science and Technology

- P018** New Size-Expanded Fluorescent Thymine Analogue : Synthesis, Characterization and Application
Shingo Hirashima¹⁾, Ji Hoon Han¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P019** Cationic Guanine-Containing PNA with High DNA Affinity Preferring Duplex Formation with DNA to PNA
Masaki Hibino¹⁾, Yuichiro Aiba¹⁾, Osami Shoji¹⁾, Yoshihito Watanabe²⁾
1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Research Center for Materials Science, Nagoya University, Japan
- P020** RNA imaging *in vivo* with 8-position modified guanosine derivatives
Takumi Ishizuka¹⁾, Chao-Da Xiao¹⁾, Pei-Yan Zhao¹⁾, Ryuichi Nishii²⁾, Yan Xu¹⁾
1) Faculty of Medicine, University of Miyazaki, 2) Department of Molecular Imaging and Theranostics, National Institute of Radiological Sciences
- P021** Novel Design Strategy of DNA-Peptide Ribonucleic Acid (PRNA) Chimeras Toward Control the RNase H Activities
Masahito Inagaki¹⁾, Daisuke Unabara¹⁾, Ryohei Uematsu¹⁾, Yasuyuki Araki¹⁾, Masaki Nishijima¹⁾, Satoru Ishibashi²⁾, Takanori Yokota²⁾, Takehiko Wada¹⁾
1) Institute of multidisciplinary research for advanced material (IMRAM), Tohoku university, 2) Department of neurology and neurological science, Tokyo medical and dental university
- P022** Synthesis and Evaluation of Photoactive Nucleic Acid Analogues for RNA Acetylation
Kenji Kikuta, Jan Barta, Yosuke Taniguchi, Shigeki Sasaki
Graduate School of Pharmaceutical Sciences, Kyushu University
- P023** General synthesis and knockdown activity of prodrug-type 2'-O-methyldithiomethyl oligonucleotide
Yosuke Ochi, Junsuke Hayashi, Yasuyuki Morita, Misa Nishigaki, Shun-ichi Wada, Hidehito Urata
Department of Bioorganic Chemistry, Osaka University of Pharmaceutical Sciences
- P024** Nucleolipids as building blocks for bioinspired material
Aladin Hamoud, Philippe Barthélémy, Valérie Desvergnès
University of Bordeaux
- P025** Selective Suppression of Mutant KRAS(G12D) Gene by Antisense Oligonucleotides and siRNAs
Yasuo Shiohama¹⁾, Takashi Fujita¹⁾, Ping Ning¹⁾, Constantinos Demonacos²⁾, Marija Krstic-Demonacos³⁾, Gianpiero Di Leva³⁾, Masayuki Fujii¹⁾
1) Department of Environmental & Biological Chemistry, Kindai University, 2) Division of Pharmacy and Optometry, School of Health Sciences, Faculty of Biology, Medicine and Health Sciences, University of Manchester, 3) College of Science & Technology, School of Environment & Life Sciences, University of Salford
- P026** Sequence selective RNA degradation using photo-cross-linking ODN-RNase H conjugates
Haruka Hirose¹⁾, Soichi Tatsumi¹⁾, Akio Kobori²⁾
1) Graduate school of Science and Technology, Kyoto Institute of Technology, 2) Faculty of Molecular Chemistry and Engineering, Kyoto Institute of Technology
- P027** Synthesis of an Antisense Oligonucleotide Having Amide-linked RNA Segments at the Both Ends
Reiko Iwase¹⁾²⁾, Tatsuya Ochikubo¹⁾, Yusuke Ohkubo²⁾, Hiroki Yajima²⁾, Takumi Komiyama²⁾, Kento Yoneyama²⁾, Mitsuki Furuya²⁾, Yuta Ogihara²⁾
1) Division of Biosciences, Graduate School of Science & Engineering, Teikyo University of Science, Graduate School, 2) Department of Life & Health Sciences, Faculty of Life & Environmental Sciences, Teikyo University of Science

- P028** Analysis and Purification of Charge-Neutral Oligonucleotide Analogues by Polyacrylamide Gel Electrophoresis
Alesya Fokina¹⁾, Meiling Wang²⁾, Kristina Klabenkova¹⁾²⁾, Ekaterina Burakova¹⁾, Masayuki Fujii³⁾, Dmitry Stetsenko¹⁾²⁾
1) Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the Russian Academy of Sciences, 2) Novosibirsk State University, Novosibirsk, Russia, 3) Kindai University, Fukuoka, Japan
- P029** Evaluating the reactivity of oligonucleotides containing an acyclic 5-fluorocytosine nucleoside on DNA methylation
Shohei Utsumi¹⁾, Kousuke Sato²⁾, Satoshi Ichikawa¹⁾
1) Faculty of Pharmaceutical Sciences, Hokkaido University, 2) Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido
- P030** Control of cleavage sites by RNase H using cationic oligopeptides
Taku Suenaga¹⁾, Yuta Mitsuhashi¹⁾, Yusuke Maeda¹⁾, Rintaro Hara¹⁾²⁾, Kazuki Sato¹⁾, Takeshi Wada¹⁾
1) Department of Pharmaceutical Sciences, Graduate School of Pharmaceutical Sciences, Tokyo University of Science, 2) Graduate School of Medical and Dental Sciences
- P031** Synthetic small molecule-stabilized RNA pseudoknot as an activator for –1 ribosomal frameshifting
Asako Murata¹⁾, Saki Matsumoto¹⁾, Neva Caliskan²⁾, Marina V. Rodnina³⁾, Kazuhiko Nakatani¹⁾
1) The Institute of Scientific and Industrial Research (ISIR), Osaka University, 2) Helmholtz Institute for RNA-based Infection Research (HIRI), Helmholtz Centre for Infection Research, 3) Department of Physical Biochemistry, Max Planck Institute for Biophysical Chemistry
- P032** Effects of polyethylene glycols on DNA structure and stability using molecular dynamics simulations
Tatsuya Ohyama¹⁾, Hisae Tateishi-Karimata¹⁾, Shigenori Tanaka²⁾, Naoki Sugimoto¹⁾³⁾
1) Frontier Institute for Biomolecular Engineering Research (FIBER), 2) Graduate School of System Informatics, Kobe University, Kobe, Japan, 3) Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
- P033** Effects of molecular crowding on nearest-neighbor rules for Watson-Crick self-complementary DNA duplexes
Saptarshi Ghosh¹⁾, Shuntaro Takahashi¹⁾, Tamaki Endoh¹⁾, Hisae Tateishi-Karimata¹⁾, Soumitra Hazra¹⁾, Naoki Sugimoto¹⁾²⁾
1) Frontier Institute for Biomolecular Engineering Research, Konan University, 2) Graduate School of Frontiers of Innovative Research in Science and Technology, Konan University
- P034** Construction of reduction-responsive oligonucleotides
Ayaka Banno¹⁾, Sayuri Higashi²⁾, Aya Shibata¹⁾, Yukio Kitade²⁾, Masato Ikeda¹⁾²⁾³⁾
1) Department of Life Science and Chemistry, Graduate School of Natural Science and Technology, Gifu University, 2) United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, 3) Center for Highly Advanced Integration of Nano and Life Sciences (G-chain)
- P035** Photocaged Guanine Modulates Riboswitch Function by Light
Dhamodharan Venugopal, Yoko Nomura, Mohammed Dwidar, Yohei Yokobayashi
Nucleic Acid Chemistry and Engineering Unit, Okinawa Institute of Science and Technology Graduate University (OIST)
- P036** Photo-controllable DNA isothermal amplification by enzymatic ligation
Bohao Cheng¹⁾, Hiromu Kashida¹⁾, Naohiko Shimada²⁾, Atsushi Maruyama²⁾, Hiroyuki Asanuma¹⁾
1) Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, 2) Department of Life Science and Technology, Tokyo Institute of Technology

- P037** A fluorescent benzo[*g*]imidazo[4,5-*c*]quinoline nucleoside reports cytidine in complementary DNA by changes in fluorescence intensity and wavelength
Yoshio Saito, Shogo Siraiwa, Masaki Yanagi
College of Engineering Nihon University
- P038** Large deletion mutations induced by abasic site analog in human cells
Hiroyuki Kamiya¹⁾²⁾, Yuri Katayama²⁾, Tetsuya Suzuki¹⁾²⁾, Yasuo Komatsu³⁾
1) Graduate School of Biomedical and Health Sciences, Hiroshima University, 2) School of Pharmaceutical Sciences, Hiroshima University, 3) Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
- P039** Photoreaction of Bromouracil in DNA/RNA hybrid
Ryu Tashiro¹⁾, Yum Jihye²⁾, Soyoung Park²⁾, Fumitaka Hashiya²⁾, Hiroshi Sugiyama²⁾³⁾
1) Faculty of Pharmaceutical Sciences Suzuka University of Medical Sciences, 2) Department of Chemistry, Graduate School of Science, Kyoto University, 3) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P040** Synthesis and properties of photo-responsive DNA probes containing photo-cleavable protecting group and thioxanthone as a photo-sensitizer
Leo Takeshita, Yoshiaki Masaki, Kohji Seio
Department of Life Science and Technology, Tokyo Institute of Technology
- P041** Repeat DNA assisted dimerization of mismatch binding molecules through intermolecular disulfide formation
Takeshi Yamada, Kazuhiko Nakatani
ISIR, Osaka University
- P042** Synthesis of oligodeoxyribonucleotides containing 2-*N*-heteroarylguanine residues and their effect on G-quadruplex structure and stability
Atsuya Maruyama, Takeshi Inde, Yoshiaki Masaki, Kohji Seio
Department of Life Science, Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology
- P043** Methylation analysis of retrotransposon using artificial nucleic acid probe
Fumika Takeuchi¹⁾, Akimitsu Okamoto¹⁾²⁾
1) Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo, 2) The Research Center for Advanced Science and Technology (RCAST), The University of Tokyo.
- P044** Increments in the thermal stability of G-quadruplexes with a long loop using bulky cations
Kazuya Tanabe¹⁾, Masao Horita¹⁾, Suzuna Morita¹⁾, Daisuke Miyoshi¹⁾, Naoki Sugimoto¹⁾²⁾, Shu-ichi Nakano¹⁾
1) Department of Nanobiochemistry, Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, 2) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University
- P045** Detection of 5-Hydroxymethylcytosine in RNA by Using Peroxotungstate-Mediated Oxidation
Kenta Koyama¹⁾²⁾, Gosuke Hayashi¹⁾, Akimitsu Okamoto¹⁾²⁾
1) Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, 2) The Research Center for Advanced Science and Technology, The University of Tokyo
- P046** Modular DNA-based Hybrid Catalysts as a Toolbox for Asymmetric Catalysis
Soyoung Park¹⁾, Ji Hye Yum¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P047** Cytotoxicity of Alkylating PI Polyamides Library
Tomo Ohno¹⁾, Gengo Kashiwazaki²⁾, Kaori Hashiya¹⁾, Toshikazu Bando¹⁾, Hiroshi Sugiyama¹⁾³⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Department of Advanced Bioscience, Faculty of Agriculture, Kindai University, 3) Institute for Integrated Cell-Material Science (iCeMS), Kyoto University

- P048** Functionalization of α, β -unsaturated ketones by DNA Hybrid Catalysts using Chloramine salts
Haruka Matsui¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P049** Synthesis of Oligodeoxynucleotides for Lysine Modification to Induce Solvatochromic Fluorescent Lactam
Mariko Aso¹⁾, Chiemi Gatanaga¹⁾, Chiyo Ota²⁾, Go Hirai¹⁾, Yosuke Taniguchi¹⁾, Shigeki Sasaki¹⁾
1) Graduate School of Pharmaceutical Sciences, Kyushu University, 2) Faculty of Pharmaceutical Sciences
- P050** Effect of G-quadruplex stability and structure in the template DNA on transcript mutations in normal and cancer cell
Hisae Tateishi-Karimata¹⁾, Naoki Sugimoto¹⁾²⁾
1) Frontier Institute for Biomolecular Engineering Research (FIBER) Konan University, 2) Graduate school of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
- P051** Identification of DNA G-quadruplex and i-motif binding ligands by a fluorescent screening system
Yoshiki Imagawa¹⁾, Kazuki Kohata²⁾, Naoki Sugimoto¹⁾²⁾, Daisuke Miyoshi¹⁾
1) Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University Kobe, Japan, 2) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University Kobe, Japan
- P052** Identification of optimal structure and nucleotide sequences of AD-gRNA for an efficient site-directed A-to-I RNA editing
Kanako Nose, Rina Hoshino, Masatora Fukuda
Department of Chemistry, Faculty of Science, Fukuoka University
- P053** Photochemical repair of thymidine dimer in DNA using 3-vinylcarbazole derivatives as photosensitizer
Tsubasa Yamaguchi, Ryosuke Jimbo, Shigetaka Nakamura, Kenzo Fujimoto
Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology
- P054** Investigation of DNA Quadruplex-Duplex Hybrids for Asymmetric Synthesis
Ji Hye Yum¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P055** Phase separation of nucleic acids induced by cationic peptides and molecular crowding conditions
Kazuki Kohata¹⁾, Naoki Sugimoto¹⁾²⁾, Daisuke Miyoshi¹⁾
1) Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, 2) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University
- P056** 1,3-Di(quinolin-2-yl) guanidine binding to C9orf72 GGCCCC repeat DNA in ALS/FTD
Eitaro Murakami, Tomonori Shibata, Kazuhiko Nakatani
The Institute of Scientific and Industrial Research (ISIR), Osaka University
- P057** Signal-on electrochemical sensors utilizing pillar electrodes modified with nucleic acid redox probes
Hiroki Nishimura, Tadao Takada, Tomoya Yamashita, Mitsunobu Nakamura, Kazushige Yamana
Department of Applied Chemistry, University of Hyogo

- P058** Fluorescent nucleic acids modified with stacked cyanine dyes
Koma Nishida, Tadao Takada, Aoi Nakano, Mitsunobu Nakamura, Kazushige Yamana
Department of Applied Chemistry, University of Hyogo
- P059** Regulation of Gene Expression by Triplex Nucleic Acid and Triplex Nucleic Acid-Binding Proteins
Maiko Shimmura, Kota Sugiyama, Kazuki Kiuchi, Norihiro Sato, Takuma Katayama, Hidetaka Torigoe
Department of Applied chemistry, Faculty of Science, Tokyo University of Science
- P060** Development of novel miRNA detection system using PCR with C-Bulge probe and fluorescence molecule
Fumie Takei¹⁾, Misaki Akiyama¹⁾²⁾, Asako Murata²⁾, Akiko Sugai²⁾, Kazuhiko Nakatani²⁾, Ichiro Yamashita³⁾
1) Department of Chemistry, National Defense Medical College (NDMC), 2) The Institute of Scientific and Industrial Research (ISIR), Osaka University, 3) Graduate School of Engineering, Osaka University
- P061** Spontaneous pseudorotaxane formation targeting nucleic acids and fluorogenic click chemistry
Kazumitsu Onizuka¹⁾, Jumpei Matsuyama¹⁾, Takuya Miyashita¹⁾, Yuuya Kawasaki²⁾, Kazunobu Igawa²⁾, Katsuhiko Tomooka²⁾, Fumi Nagatsugi¹⁾
1) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2) Institute for Materials Chemistry and Engineering, Kyushu University
- P062** TAMRA-Polypyrrole for A/T Sequence Visualization on DNA Molecules
Seonghyun Lee¹⁾, Yusuke Kawamoto²⁾, Hiroshi Sugiyama²⁾, Kyubong Jo¹⁾
1) Department of Chemistry and Interdisciplinary Program of Integrated Biotechnology, Sogang University, 2) Department of Chemistry, Graduate School of Science, Kyoto University
- P063** Single-molecule observation of DNA looping
Xuelin Jin, Kyubong Jo
Department of Chemistry, Interdisciplinary Program of Integrated Biotechnology, Sogang University
- P064** Functional Regulation of Epigenetic DNA Modifications using Photoreactive Oligonucleotides
Asako Yamayoshi¹⁾²⁾, Takayuki Shibata³⁾, Yui Sakai¹⁾, Takeshi Yamada⁴⁾, Tsuyoshi Yamamoto¹⁾, Takehiko Wada⁵⁾, Kazuhiko Nakatani⁴⁾
1) Chemistry of Functional Molecules, Graduate School of Biomedical Sciences, Nagasaki University, 2) PRESTO • JST, 3) Graduate School of Health Sciences, Gunma University, 4) The Institute of Scientific and Industrial Research, Osaka University, 5) Institute of Multi-disciplinary Research for Advanced Materials, Tohoku University
- P065** Facile post-synthetic modification of 3' terminus of DNA
Tatsuya Yajima, Junpei Yamamoto, Shigenori Iwai
Department of Chemistry, Graduate School of Engineering Science, Osaka University
- P066** Electron Injection into DNA from Mitochondrial Transcription Factor A
Fumitaka Hashiya¹⁾, Shinji Ito³⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences, Institute for Advanced Study, Kyoto University, 3) Medical Research Support Center, Graduate School of Medicine, Kyoto University
- P067** Direct real-time monitoring of DNA double-strand breaks: Protective effect of ascorbic acid and its derivatives
Moe Usui, Yuko Yoshikawa, Takahiro Kenmotsu, Kenichi Yoshikawa
Graduate School of Life and Medical Sciences, Doshisha University

- P068** Exploring the Capping Code: Co-transcriptional Capping Reagents Allow the Syntheses of Cap 0, Cap 1, Cap 2 and Cap 1 (^{m6}A) Capped Messenger RNAs
Dongwon Shin¹, Krist T. Azizian², Jordana M. Henderson¹, Richard I. Hogrefe¹, Michael Houston¹, Alexandre Lebedev¹, Anton P. McCaffrey¹
1) TriLink BioTechnologies, LLC, 2) Synthetic Genomics, Inc.
- P069** Single Molecule Visualization for Quantitative Analysis of Small Amounts of DNA Using Microfluidic Device
Nabin Won, Siwon Kim, Kyubong Jo
Department of Chemistry and Interdisciplinary Program of Integrated Biotechnology, Sogang University
- P070** Assembling cascade enzymes on a 3D DNA nanostructure
Peng LIN, Huyen Dinh, Nguyen Minh Thang, Eiji Nakata, Takashi Morii
Institute of Advanced Energy, Kyoto University
- P071** Generation of anti-CD24 aptamer by crossover SELEX
Yusuke Kitamura, Hiroshi Goto, Yousuke Katsuda, Toshihiro Ihara
Division of Materials Science, Faculty of Advanced Science and Technology, Kumamoto University
- P072** Nanoliposome enclosing proteins on DNA scaffold
Hiroaki Konishi, Huyen Dinh, Tomohiko Wakisaka, Eiji Nakata, Shun Nakano, Takashi Morii
Institute of Advanced Energy, Kyoto University
- P073** Bioactive sequences constructed by chemical ligation
Kosuke Nakamoto¹, Naoko Abe¹, Hiroshi Abe^{1,2}
1) Department of Chemistry, Graduate School of Science, Nagoya university, 2) JST CREST "Large-Scale Genome Synthesis and Cell Programming"
- P074** Development of Modified Oligonucleotides Containing Benzophenone Moieties as Photo-reactive Groups
Toshihisa Sunaga, Dai Motegi, Yuya Motegi, Kazuo Shinozuka, Tomohisa Moriguchi
Division of Molecular Science, Graduate School of Science and Technology, Gunma University
- P075** Consecutive formation of thymine-Hg^{II}-thymine base pairs catalyzed by DNA polymerases
Hidehito Urata¹, Tatsuya Funai¹, Chizuko Tagawa¹, Akira Ono², Shun-ichi Wada¹
1) Department of Bioorganic Chemistry, Osaka University of Pharmaceutical Sciences, 2) Department of Material & Life Chemistry, Faculty of Engineering, Kanagawa University, Japan
- P076** High throughput molecular design/exploration for DNA bulge/mismatch recognition: computational approach by elongation method
Yuuichi Orimoto¹, Anna Pomogaeva^{1,2}, Ayaka Yano³, Kazuhiko Nakatani³, Yuriko Aoki¹
1) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University, 2) Institute of Chemistry, St. Petersburg State University, Russia, 3) The Institute of Scientific and Industrial Research, Osaka University, Japan
- P077** Deoxyribozymes composed of G-quadruplex DNA and heme or a water-soluble phthalocyanine derivative
Mami Uchiyama¹, Tomokazu Shibata¹, Atsuya Momotake¹, Takahisa Ikeue², Rei Fujishiro², Hikaru Hemmi³, Yasuhiko Yamamoto¹
1) Doctoral Program in Chemistry, Graduate School of Pure and Applied Sciences, University of Tsukuba, 2) Grad.Sch.Sci.Eng., Shimane Univ., 3) Food Research Institute, NARO

- P078** Effects of Hg(II) and Ag(I) on the structure of the rRNA A site molecular switches
Miki Nagashima¹⁾, Chiharu Suzuki²⁾, Akari Tsudura²⁾, Yuriko Uchida²⁾, Kenta Kubodera²⁾, Akira Ono³⁾, Jiro Kondo¹⁾²⁾
1) Graduate School of Science and Technology, Sophia University, 2) Faculty of Science and Technology, Sophia University, 3) Faculty of Engineering, Kanagawa University
- P079** Crystal structures of DNA and RNA duplexes containing gold- and copper-mediated base pairs
Erika Iwase¹⁾, Yoshinari Tada¹⁾, Akira Ono²⁾, Jiro Kondo¹⁾
1) Graduate School of Science and Technology, Sophia University, 2) Faculty of Engineering, Kanagawa University
- P080** X-Ray analyses of antisense oligonucleotides with modified ribose rings
Hiromi Takahashi, Jiro Kondo
Graduate School of Science and Technology, Sophia University
- P081** Transformation of selective i-motif DNAs into hairpin-like structures induced by a flavonoid compound
Shuntaro Takahashi¹⁾, Sudipta Bhowmik²⁾, Saptarshi Ghosh¹⁾, Naoki Sugimoto¹⁾³⁾
1) Frontier Institute for Biomolecular Engineering Research, Konan University, 2) Department of Biophysics, Molecular Biology and Bioinformatics, University of Calcutta, 3) Graduate School of Frontiers of Innovative Research in Science and Technology, Konan University
- P082** Synthesis of mRNA with site-specific N⁶-alkyl adenosine and its translation efficiency
Akihiro Imaeda¹⁾, Ryota Oikawa¹⁾, Kiyoshi Asai²⁾, Junichi Iwakiri²⁾, Shun Sakuraba³⁾, Naoko Abe¹⁾, Fumiaki Tomoike¹⁾, Yasuaki Kimura¹⁾, Hiroshi Abe¹⁾⁴⁾
1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Graduate School of Frontier Sciences, The University of Tokyo, 3) National Institutes for Quantum and Radiological and Technological Science, 4) JST CREST "Large-Scale Genome Synthesis and Cell Programming"
- P083** Rationally engineered ribozyme activatable by ligand induced restoration of tertiary structure
Chikara Dohno, Maki Kimura, Kazuhiko Nakatani
The Institute of Scientific and Industrial Research, Osaka University
- P084** A Novel Approach to the Determination of Nucleosome Structure Using the Highly Emissive Nucleobase thdG-tC FRET pair
Ji Hoon Han¹⁾, Soyoung Park¹⁾, Fumitaka Hashiya¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS)
- P085** Construction and Application of Bipyridine-functionalized G-quadruplexes
Rio Yanagitani¹⁾, Sohei Sakashita¹⁾, Ji Hye Yum¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P086** Synthesis of ferrocenyl cyclic-naphthalene diimide and its applicability for electrochemical telomerase assay
Syuma Kaneyoshi¹⁾, Shinobu Sato¹⁾²⁾, Shigeori Takenaka¹⁾²⁾
1) Department of Chemistry, Kyushu Institute of Technology, 2) Research Center for Bio-microsensing Technology
- P087** Optimizing the Design of PNA-NLS Conjugates for Enhanced Invasion of dsDNA
Gerardo Urbina¹⁾, Yuichiro Aiba¹⁾, Osami Shoji¹⁾, Yoshihito Watanabe²⁾
1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Research Center for Materials Science, Nagoya University

- P088** Analysis of interaction between quinolone derivatives and bulge regions of RNA
Ayuka Watanabe¹⁾, Konami Nagano¹⁾, Takashi Kamimura²⁾, Shingo Nakamura²⁾, Gota Kawai¹⁾
1) Department of Life and Environmental Sciences, Chiba Institute of Technology, 2) Veritas In Silico Inc.
- P089** RNA-targeting small molecule drug discovery: Design and validation of Screening probes
Amiu Shino, Takashi Kamimura, Shingo Nakamura
Veritas In Silico Inc.
- P090** Development of Isoquinoline Ligand Binding to r(CUG) Repeats
Jun Matsumoto¹⁾, Jinxing Li¹⁾, Masayuki Nakamori²⁾, Asako Murata¹⁾, Chikara Dohno¹⁾, Kazuhiko Nakatani¹⁾
1) The Institute of Science and Industrial Research, Osaka University, 2) Department of Neurology, Graduate School of Medicine, Osaka University
- P091** Thermodynamic Properties of the Specific Binding between Metal Ion and Mismatched Base Pairs Involving 5-Hydroxyuracil or 5-Hydroxycytosines
Fumihiko Arakawa¹⁾, Ayami Yaguchi¹⁾, Akira Ono²⁾, Jiro Kondo³⁾, Hidetaka Torigoe¹⁾
1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Material & Life Chemistry, Faculty of Engineering, Kanagawa University, 3) Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
- P092** Specific Binding between Metal Ion and Mismatched Base Pair Involving 5-Carboxycytosines
Saki Adachi¹⁾, Fumihiko Arakawa¹⁾, Akira Ono²⁾, Hidetaka Torigoe¹⁾
1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Material & Life Chemistry, Faculty of Engineering, Kanagawa University
- P093** The interaction analysis of a cyclic tetraoxazole with telomeric i-motif DNA
Shadi Sedghi Masoud¹⁾, Yudai Yamaoki²⁾, Yue Ma¹⁾, Adrien Marchand³⁾, Fernaldo Richtia Winnerdy⁴⁾, Valérie Gabelica³⁾, Anh Tuân Phan⁴⁾, Masato Katahira²⁾, Kazuo Nagasawa¹⁾
1) Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology, 2) Institute of Advanced Energy and Graduate School of Energy Science, Kyoto University, 3) University of Bordeaux, INSERM, CNRS, 4) School of Physical and Mathematical Sciences, Nanyang Technological University
- P094** Development of RNA Aptamer That Has High Anti-prion Activity and Its Structural Basis
Tsukasa Mashima¹⁾²⁾, Lee Joon-Hwa³⁾, Yuji O. Kamatari⁴⁾, Tomohiko Hayashi¹⁾, Fumiko Nishikawa⁵⁾, Takashi Nagata¹⁾²⁾, Satoshi Nishikawa⁵⁾, Masashiro Kinoshita¹⁾²⁾, Kazuo Kuwata⁶⁾, Masato Katahira¹⁾²⁾
1) Institute of Advanced Energy, Kyoto University, 2) Graduate School of Energy Science, Kyoto University, 3) Department of Chemistry and Research Institute of Natural Science, Gyeongsang National University, 4) Life Science Research Center, Gifu University, 5) National Institute of Advanced Industrial Science and Technology, 6) Unit. Grad. Sch. of Drug Disc. and Med. Info. Sci., Gifu University
- P095** DNA Catenane and Rotaxane Inside a DNA Origami Frame
Arivazhagan Rajendran¹⁾, Seo-jeong Park²⁾, Eiji Nakata¹⁾, Youngjoo Kwon²⁾, Takashi Morii¹⁾
1) Institute of Advanced Energy, Kyoto University, 2) College of Pharmacy, Ewha Womans University
- P096** Creation of D-DNA/L-DNA hybrid duplex by using 5-methylcytosine
Haruka Murabayashi¹⁾, Tohru Taniguchi²⁾, Kenji Monde²⁾
1) Graduate School of Life Science, Hokkaido University, 2) Faculty of Advanced Life Science, Hokkaido University
- P097** Development of visible light-responsive 10-23 DNAzyme
Yukiko Kamiya¹⁾, Yu Arimura¹⁾, Hideaki Ooi¹⁾, Kenjiro Kato¹⁾, Xingguo Liang¹⁾²⁾, Hiroyuki Asanuma¹⁾
1) Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, 2) School of Food Science and Technology, Ocean University of China

- P098** Development of Mammalian ON-Riboswitches by High-Throughput Sequencing
Kamila Mustafina, Yohei Yokobayashi
Nucleic Acid Chemistry and Engineering Unit, Okinawa Institute of Science and Technology Graduate University
- P099** Synthetic Ribozyme Scaffold for Development of Aptazymes and Riboswitches
Yoko Nomura, Kamila Mustafina, Rachapun Rotrattanadumrong, Yohei Yokobayashi
Nucleic Acid Chemistry and Engineering Unit, Okinawa Institute of Science and Technology
- P100** Facile quantification of miRNA in biological samples
Kizuki Ichimi¹⁾, Yu Watari¹⁾, Akio Kobori²⁾
1) Graduate school of Science and Technology, Kyoto Institute of Technology, 2) Faculty of Molecular Chemistry and Engineering, Kyoto Institute of Technology
- P101** Optimization of junction sequence between two aptamers for constructing signaling aptamer by using RNA library on microspheres
Tamaki Endoh¹⁾, Naoki Sugimoto¹⁾²⁾
1) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University, 2) Graduate school of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
- P102** Detection of Cytosine Variants of DNA Using Surface Plasmon Resonance-Based Immunoassay
Takaaki Kurinomaru, Naoshi Kojima, Ryoji Kurita
Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
- P103** Enhancement of the allosteric nucleic acid enzymes activity by the cationic copolymers for miRNAs detection
Orakan Hanpanich, Naohiko Shimada, Atsushi Maruyama
Department of Life Science and Technology, Tokyo Institute of Technology
- P104** Tetraplex DNA recognition of Cyclic naphthalene diimide dimer
Ryusuke Takeuchi¹⁾, Tingting Zou¹⁾²⁾, Shinobu Sato¹⁾²⁾, Shigeori Takenaka¹⁾²⁾
1) Department of Applied Chemistry, Kyushu Institute of Technology, 2) Research Center for Bio-microsensing Technology, Kyushu Institute of Technology
- P105** Cyclic anthraquinone as a new type of tetraplex DNA binder
Daiki Wakahara¹⁾, Shinobu Sato¹⁾²⁾, Shigeori Takenaka¹⁾²⁾
1) Graduate School of Engineering, Kyushu Institute of Technology, 2) RCBT
- P106** MicroRNA pattern recognition for cancers using programmable DNA and a biological nanopore
Nanami Takeuchi, Asuka Tada, Ryuji Kawano
Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology
- P107** Application of DNA Quadruplex Hydrogels as Biomaterials
Shizuma Tanaka, Kenta Wakabayashi, Kazuki Fukushima, Shinsuke Yukami, Yuichi Ohya, Akinori Kuzuya
Department of Chemistry, Materials Engineering Faculty of Chemistry, Materials and Bioengineering Kansai University
- P108** Design of sequence specific modular adaptors by tuning the reactivity of protein-tag substrates
Zhengxiao Zhang, Eiji Nakata, Thang Minh Nguyen, Takashi Morii
Institute of Advanced Energy, Kyoto University

- P109** Dual sensing of ATP and ADP by fluorescent ribonucleopeptide sensors
Shun Nakano, Musashi Shimizu, Takashi Morii
Institute of Advanced Energy, Kyoto University
- P110** Screening of anti-idiotypic aptamer against Nivolumab
Yutaka Shimizu¹⁾, Taro Saito¹⁾, Kaori Tsukakoshi¹⁾, Tomohiro Yamada²⁾, Kenichiro Todoroki²⁾, Kazunori Ikebukuro¹⁾
1) Affiliation : Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology, 2) School of Pharmaceutical Sciences, University of Shizuoka
- P111** Screening of DNA aptamers against synthetic lipopeptide UPM-1 for *Ureaplasma* detection
Jeany Meza¹⁾, Maui Nishio¹⁾, Kaori Tsukakoshi¹⁾, Itaru Yanagihara²⁾, Kenichiro Hata³⁾, Kazuhiko Nakahashi³⁾, Kazunori Ikebukuro¹⁾
1) Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology, 2) Department of Developmental Medicine, Research Institute, Osaka Women's and Children's Hospital, 3) Department of Maternal-Fetal Biology, National Center for Child Health and Development
- P112** The use of a 2-aminopurine-containing split G-quadruplex for sequence-specific DNA detection
Sung Hyun Hwang, Ki Soo Park
Department of Biological Engineering, College of Engineering, Konkuk University
- P113** Fluorescence anisotropy-based nucleic acid testing for rapid diagnosis of health care-associated infections
Woo Young Kwon, Ki Soo Park
Department of Biological Engineering, College of Engineering, Konkuk University
- P114** Target-induced modulation of DNA polymerase activity
Byung Seok Cha, Ki Soo Park
Department of Biological Engineering, College of Engineering, Konkuk University
- P115** Reversible switching of DNA polymerase using metal ions as new regulators
Seok Joon Kim, Ki Soo Park
Department of Biological Engineering, College of Engineering, Konkuk University
- P116** Culture-free diagnosis of enteric fever using a magneto-DNA nanoparticle system
Jimin Kim, Ki Soo Park
Department of Biological Engineering, College of Engineering, Konkuk University
- P117** Fluorescent Molecular Rotors for Specific Biomolecular Detection
Yuka Kataoka¹⁾, Hiroto Fujita²⁾, Yuuya Kasahara³⁾⁴⁾, Chioko Nagao³⁾, Satoshi Obika³⁾⁴⁾, Masayasu Kuwahara²⁾
1) Graduate School of Science and Technology, Gunma University, 2) Graduate School of Integrated Basic Sciences, Nihon University, 3) National Institutes of Biomedical Innovation, Health and Nutrition, 4) Graduate School of Pharmaceutical Sciences, Osaka University
- P118** Single oligonucleotide separation using a biological nanopore-filter
Asuka Tada, Ryuji Kawano
Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology
- P119** The Development of Cell Membrane Permeable Oligonucleotides
Zhaoma Shu¹⁾, Iku Tanaka¹⁾, Azumi Ota¹⁾, Daichi Fushihara¹⁾, Naoko Abe¹⁾, Yasuaki Kimura¹⁾, Fumiaki Tomoike¹⁾, Seiichi Tada²⁾, Yoshihiro Ito²⁾, Hiroshi Abe¹⁾²⁾³⁾
1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) RIKEN Center for Emergent Matter Science, 3) JST CREST "Large-Scale Genome Synthesis and Cell Programming"

- P120** Cumulative deformation of a linear DNA origami structure consisting of tension-adjustable modules
Yuki Suzuki¹⁾²⁾, Kohei Mizuno²⁾, Ibuki Kawamata²⁾, Satoshi Murata²⁾
1) Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, 2) Department of Robotics, Graduate School of Engineering, Tohoku University
- P121** Improvement of Oligonucleotide Cellular Uptake with Latently Cationic Molecules
Azumi Ota¹⁾, Zhaoma Shu¹⁾, Iku Tanaka¹⁾, Daichi Fushihara¹⁾, Naoko Abe¹⁾, Fumiaki Tomoike²⁾, Yasuaki Kimura¹⁾, Seiichi Tada³⁾, Yoshihiro Ito³⁾, Hiroshi Abe¹⁾³⁾⁴⁾
1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) RIKEN Center for Emergent Matter Science, 3) Center for Molecular Medicine, Jichi Medical University, 4) JST CREST "Large-Scale Genome Synthesis and Cell Programming"
- P122** Targeted Delivery of siRNA to Dectin-1 Expressing Cells by a β -glucan, SPG
Atsushi Uno, Reiko Namikawa, Kenji Arima, Masako Shimazaki, Kazuo Sakurai
NapaJen Pharma Co., Ltd.
- P123** Optical Tweezers Study of Terminal-Specific DNA/DNA Interactions Induced by Salts
Hiroya Nakauchi¹⁾, Mizuo Maeda²⁾³⁾, Naoki Kanayama³⁾
1) Department of Biomedical Engineering, Graduate School of Science and Technology, Shinshu University, 2) Bioengineering Laboratory, RIKEN Cluster of Pioneering Research, RIKEN, 3) Graduate School of Medicine, Science and Technology, Shinshu University
- P124** DNA Scaffold-mediated Peptide Ligation
Gosuke Hayashi¹⁾, Masafumi Yanase¹⁾, Yoshiki Konda¹⁾, Yu Nakatsuka¹⁾, Akimitsu Okamoto¹⁾²⁾
1) Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, 2) Research Center for Advanced Science and Technology
- P125** Surface Observation of Self-Assembled 3D DNA Crystals by Atomic Force Microscopy
Haruhiko Eki¹⁾, Hiroshi Sugiyama¹⁾²⁾, Masayuki Endo¹⁾²⁾
1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences, Kyoto University
- P126** Single molecule real-time observation of DNA origami pinching devices using high speed AFM
Yuta Yamasaki, Naohide Akamatsu, Ryosuke Watanabe, Yuichi Ohya, Akinori Kuzuya
Department of Chemistry, Materials Engineering Faculty of Chemistry, Materials and Bioengineering Kansai University
- P127** Monomeric *N*-acetylgalactosamine phosphoramidite modules for delivery of antisense oligonucleotides to hepatocytes
Tsuyoshi Yamamoto¹⁾²⁾, Motoki Sawamura²⁾³⁾, Satoshi Obika²⁾, Mariko Harada-Shiba³⁾
1) Graduate School of Biomedical Sciences, Nagasaki University, 2) Graduate School of Pharmaceutical Sciences, Osaka University, 3) Department of Molecular Innovation in Lipidology, National Cerebral and Cardiovascular Center Research Institute
- P128** Development and Evaluation of Photoresponsive DNA Prism with Nucleic Acid Medicine
Seigi Yamamoto, Noriko Saito-Tarashima, Naoshi Yamazaki, Tatsuya Fukuta, Kentaro Kogure, Noriaki Minakawa
Graduate School of Pharmaceutical Science, Tokushima University
- P129** Liposomes Decorated with G-Quadruplex Decoy Oligonucleotides: Their Nanoparticle Delivery and Efficient Bioactivity in Pancreatic Cancer Cells
Erik B. Pedersen¹⁾, Susanne Coggi²⁾, Ulla Jacobsen¹⁾, Luigi E. Xodo²⁾, Stefan Vogel¹⁾
1) Department of Physics, Chemistry and Pharmacy, University of Southern Denmark, 2) Department of Medical and Biological Sciences, University of Udine

- P130** Structure analyses of a novel DNA helical wire containing Hg(II) -mediated T:T and T:G base pairs
Akira Ono¹⁾, Hiroki Kanazawa²⁾, Hikari Ito¹⁾, Misato Goto¹⁾, Hisao Saneyoshi¹⁾, Jiro Kondo²⁾
1) Department of material & life chemistry, Faculty of engineering, Kanagawa University, 2) Faculty of Science and Technology, Department of Materials and Life Sciences, Sophia University
- P131** Development of a detection method for oligonucleotides using MALDI imaging mass spectrometry
Yuko Nakashima¹⁾, Mitsutoshi Setou¹⁾²⁾³⁾
1) Department of Cellular and Molecular Anatomy, Hamamatsu University School of Medicine, 2) Preeminent Medical Photonics Education & Research Center, 3) Department of Anatomy, The University of Hong Kong
- P132** Metal ion binding properties of modified thymine pairs with 1,2-diamine groups in duplexes
Takahiro Atsugi, Hisao Saneyoshi, Akira Ono
Department of Materials and Life Chemistry, Kanagawa University
- P133** Development and evaluation of small molecular ligands for simultaneous binding to the repeat DNA
Gentaro Wakisaka, Hirotaka Murase, Tomoharu Noguchi, Ting Wu, Shigeki Sasaki
Graduate school of pharmaceutical sciences Kyushu University
- P134** Developing a microRNA-responsive CRISPR-Cas9 ON/OFF system to conduct cell-specific genome-editing
Moe Hirosawa¹⁾²⁾, Yoshihiko Fujita²⁾, Hirohide Saito²⁾
1) Graduate School of Medicine, Kyoto University, 2) Department of Life Science Frontiers, Center for iPS Cell Research and Application, Kyoto University