

List of Poster Presentations

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1) Faculty of Pharma-Sciences, Teikyo University, 2) Division of Organic Chemistry, National Institute of Health Sciences, 3) Faculty of Pharmaceutical Sciences, Shonan University of Medical Sciences
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1) Department of Medicinal and Life Sciences, Faculty of Pharmaceutical Sciences, Tokyo University of Science, 2) Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, 3) Department of Neurology and Neurological Science, Graduate School of Medicinal and Dental Sciences, Tokyo Medical and Dental University
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1) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2) Department of Chemistry, Graduate School of Science, Tohoku University
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Hidenori Okamura¹⁾, Rina Ito¹⁾²⁾, Kenta Sato¹⁾²⁾, Fumi Nagatsugi¹⁾²⁾
1) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2) Department of Chemistry, Graduate School of Science, Tohoku University
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1) School of Pharmaceutical Sciences, Osaka University, 2) Graduate School of Pharmaceutical Sciences, Osaka University

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Hirota Murase¹, Fumi Nagatsugi², Shigeki Sasaki¹
 1) Graduate School of Pharmaceutical Sciences, Nagasaki International University,
 2) Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University
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Kiyoshi Kakuta¹, Taiichi Sakamoto², Hajime Sato³, Kazuki Sato¹, Takeshi Wada¹
 1) Department of Medicinal and Life Sciences, Faculty of Pharmaceutical Science, Tokyo University of Science, 2) Department of Life Science, Faculty of Advanced Engineering, Chiba Institute of Technology, 3) Bruker Japan K.K. BioSpin Division
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Yuriko Saiki⁴⁽⁵⁾, Akira Horii⁴, Yasuaki Kimura¹, Hiroshi Abe¹
 1) Department of chemistry, Faculty of Science, Nagoya University, 2) Research Center for Materials Science, Nagoya University,
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 Takao Inoue³, Yosuke Demizu¹⁽²⁾
 1) Graduate School of Medical Life Science, Yokohama City University, 2) Division of Organic Chemistry, National Institute of Health Sciences, 3) Division of Molecular Target and Gene Therapy Products, National Institute of Health Sciences,
 4) Department of Pharmacy, Faculty of Pharmacy, Yasuda Women's University, 5) Graduate School of Pharmaceutical Sciences, The University of Tokyo
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 1) Graduate school of Engineering, Nihon University, 2) Laboratory for Synthetic Biology, RIKEN Center for Biosystems Dynamics Research, Osaka, Japan
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Yuuhei Yamano¹⁾, Kazumitsu Onizuka¹⁾²⁾, Madoka Sasaki²⁾, Shinichi Sato³⁾, Fumi Nagatsugi¹⁾²⁾
 1) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2) Graduate School of Science, Tohoku University, 3) Frontier Research Institute for Interdisciplinary Sciences and Graduate School of Life Sciences, Tohoku University
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 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Immunology Frontier Research Center (iFReC), Osaka University, 3) Institute for Integrated Cell-Material Science (iCeMS), Kyoto University
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 1) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University,
 2) Department of Chemistry, Graduate School of Science, Tohoku University
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 1) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University, 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
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Hisae Tateishi-Karimata¹⁾, Naoki Sugimoto¹⁾²⁾
 1) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University,
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 1) Frontier Institute for Biomolecular Engineering Research, Konan University, 2) FIRST, Konan University

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 1) Faculty of Pharmaceutical Sciences, Tokushima Bunri University, 2) Institute of Advanced Medical Sciences, Tokushima University, Kuramoto-cho 3-18-15, Tokushima 770-8503, Japan, 3) Institute of Quantum Beam Science, Graduate School of Science and Engineering, Ibaraki University, 4-12-1 Nakanarusawa, Hitachi, Ibaraki 316-8511, Japan, 4) Frontier Research Center for Applied Atomic Sciences, Ibaraki University, 162-1 Shirakata, Tokai Naka, Ibaraki 319-1106, Japan
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 1) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University, 2) School of Pharmaceutical Sciences, Sun Yat-sen University, 3) Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
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 1) Department of Life and Health Sciences, Faculty of Life and Environmental Sciences, Teikyo University of Science, 2) Graduate School of Science and Engineering, Teikyo University of Science, Graduate School
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 Biofunctional Medical Engineering Research Area, Japan Advanced Institute of Science and Technology
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 Department of Regulatory Bioorganic Chemistry, SANKEN (The Institute of Scientific and Industrial Research), Osaka University
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 Department of Chemistry and Biotechnology, graduate school of engineering, The University of Tokyo

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1) Graduate School of Biological Sciences, Tokyo University of Science, 2) Department of Microbiology, Faculty of Medicine, Shimane University, 3) Department of Medicinal and Life Sciences, Faculty of Pharmaceutical Sciences, Tokyo University of Science, 4) Research Institute for Biomedical Science, Tokyo University of Science
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1) Department of Medicinal and Life Sciences, Faculty of Pharmaceutical Sciences, Tokyo University of Science, 2) Department of Neurology and Neurological Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, 3) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science
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Biofunctional Medical Engineering Research Area, Japan Advanced Institute of Science and Technology
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1) Department of Regulatory Bioorganic Chemistry, SANKEN, Osaka University, 2) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University
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1) IMRAM, Tohoku Univ., 2) Department of Chemistry, Faculty of Science, Tohoku Univ., 3) CIRA Kyoto Univ., 4) xFOREST therapeutics
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1) Institute for Protein Research, Osaka University, 2) Department of Regulatory Bioorganic Chemistry, SANKEN, Osaka University, 3) Graduate School of Engineering Science, Yokohama National University
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1) Department of Life Science, Faculty of Advanced Engineering, Chiba Institute of Technology, 2) Department of Regulatory Bioorganic Chemistry, The Institute of Scientific and Industrial Research, Osaka University
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1) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University, Japan, 2) Department of Interdisciplinary Engineering Sciences, Chemistry and Materials Science, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Japan

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1) Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University,
2) Department of Materials and Life Chemistry, Faculty of Engineering, Kanagawa University
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Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
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Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
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College of Science and Engineering, Aoyama Gakuin University
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Division of Chemistry, Department of Medical Sciences, Faculty of Medicine, University of Miyazaki
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Department of Biotechnology and Life Sciences, Tokyo University of Agriculture and Technology
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1) Graduate School of Biological Sciences, Tokyo University of Science, 2) The Wistar Institute,
3) Research Institute for Biological Sciences, Tokyo University of Science
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Yunsong Xu, Kunihiko Morihiro, Akimitsu Okamoto
Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo
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Yoshiaki Kitamura¹⁾²⁾, Mahmoud Kandeel³⁾⁴⁾, Tomoya Kondo¹⁾, Akihiro Tanaka¹⁾, Yohei Makino¹⁾, Yukio Kitade⁵⁾
1) Faculty of Engineering, Gifu University, 2) United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, 3) Faculty of Veterinary Medicine, King Faisal University, 4) Faculty of Veterinary Medicine, Kafrelshikh University, 5) Faculty of Engineering, Aichi Institute of Technology

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 College of Science and Engineering, Aoyama Gakuin University
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 1) Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo, 2) AGC Inc.
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 Department of Life Science and Technology, Tokyo Institute of Technology
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 1) Department of Chemistry and Biotechnology, Graduate school of Engineering, The University of Tokyo, 2) Department of Bioengineering, Graduate School of Engineering, The University of Tokyo
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Fangjie Lyu¹⁾, Hayase Hakariya¹⁾, Haruka Hiraoka¹⁾, Zhenmin Li¹⁾, Noriaki Matsubara¹⁾, Satoshi Uchida²⁾, Yasuaki Kimura¹⁾, Hiroshi Abe¹⁾³⁾⁴⁾
 1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Graduate School of Medical Science, Kyoto Prefectural University of Medicine, 3) Department of Chemistry, Graduate School of Science and Research Center for Materials Science, Nagoya University, 4) Institute for Glyco-core Research (iGCORE), Nagoya University
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 Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University

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Division of Chemistry, Department of Medical Sciences, Faculty of Medicine University of Miyazaki
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Rie Ohnishi¹⁾, Shota Sekiya¹⁾, Wataru Edamura¹⁾, Shigetoshi Tachibana¹⁾, Yoshiaki Masaki¹⁾²⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) PRESTO, JST
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Yuta Ito, Koichi Mizuno, Sanae Sumise, Airi Kimura, Nozomi Noguchi, Yasufumi Fuchi, Yoshiyuki Hari
Faculty of Pharmaceutical Sciences, Tokushima Bunri University
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Koya Uekusa¹⁾, Takahito Tomori¹⁾, Aya Koyama¹⁾, Yoshiaki Masaki¹⁾²⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) PRESTO, JST
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Yusuke Takezawa, Keita Mori, Mitsuhiko Shionoya
Department of Chemistry, Graduate School of Science, The University of Tokyo
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Shogo Hasegawa¹⁾, Masahito Inagaki¹⁾, Yasuaki Kimura¹⁾, Hiroshi Abe¹⁾²⁾³⁾
1) Nagoya University of Science, 2) CREST, Japan Science and Technology Agency, 3) Institute for Glyco-core Research (iGCORE)
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Taichi Yagata¹⁾, Yoshiaki Masaki¹⁾²⁾, Yukiko Onishi¹⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) JST, PRESTO
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Yoshiaki Masaki¹⁾²⁾, Yukiko Onishi¹⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) PRESTO, JST
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Shigetoshi Tachibana¹⁾, Takayuki Kanagawa¹⁾, Rie Ohnishi¹⁾, Yoshiaki Masaki¹⁾²⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) PRESTO, JST
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Ayano Tabira¹⁾, Yoshiaki Masaki¹⁾²⁾, Shihori Hattori¹⁾, Shunsuke Wakatsuki¹⁾, Kohji Seio¹⁾
1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) PRESTO, JST.
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Ryosei Komiyama, Kunihiko Morihiko, Akimitsu Okamoto
Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo

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Ryosuke Ishimaru¹⁾²⁾, Bimolendu Das²⁾, Kazuhiko Nakatani²⁾
 1) Department of Chemistry, Faculty of Science, Osaka University,
 2) SANKEN (The Institute of Scientific and Industrial Research), Osaka University
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Takeshi Yamada, Qingwen Chen, Kazuhiko Nakatani
 SANKEN, Osaka University
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Juki Nakao¹⁾, Honoka Eshima¹⁾, Yu Mikame¹⁾, Tsuyoshi Yamamoto¹⁾, Chikara Dohno²⁾, Takehiko Wada³⁾, Asako Yamayoshi¹⁾
 1) Grad. Sch. Biomed. Sci., Nagasaki Univ., 2) SANKEN, Osaka Univ., 3) IMRAM, Tohoku Univ.
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Tatsuya Kemmoku, Shoji Fujiwara, Akira Ono
 Department of Biological Chemistry, Faculty of Engineering, Kanagawa University
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Kentaro Kobata, Kazuki Matsubara, Kazuya Matsuo, Tomonori Waku, Akio Kobori
 Graduate school of science and technology, Kyoto Institute of Technology
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Nozomu Ishiwata¹⁾, Masahito Inagaki²⁾, Kazutoshi Fujita¹⁾, Masaki Nishijima¹⁾, Yasuyuki Araki¹⁾, Hironori Hayashi³⁾, Eiichi Kodama³⁾, Takehiko Wada¹⁾
 1) IMRAM, Tohoku University, 2) Graduate School of Science, Nagoya University, 3) IRIDeS, Tohoku University
- 2P-17** Inhibition of the Activity of Base Excision Repair Enzymes by Mismatch Binding Ligand Binding to Uracil-containing DNA
Anisa Ulhusna, Asako Murata, Kazuhiko Nakatani
 Department of Regulatory Bioorganic Chemistry, The Institute of Scientific and Industrial Research, Osaka University
- 2P-18** Simple and Efficient Method for Site-selective Internal Tritium Labeling of Chemically Modified Oligonucleotides
Shigeki Sasaki¹⁾³⁾, Hitotaka Murase¹⁾³⁾, Jeongsu Lee¹⁾, Yosuke Taniguchi²⁾
 1) Graduate School of Pharmaceutical Sciences, Nagasaki International University,
 2) Graduate School of Pharmaceutical Sciences, Kyushu University, 3) RINAT-Imaging Inc.
- 2P-19** Prediction of RNA duplex stability in physiological crowding conditions based on the nearest-neighbor model
Saptarshi Ghosh¹⁾, Shuntaro Takahashi¹⁾, Dipanwita Banerjee¹⁾, Tatsuya Ohyama¹⁾, Tamaki Endoh¹⁾, 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
- 2P-20** The effect of stability and topology of G-quadruplex on DNA methylation
Saki Matsumoto¹⁾, 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

- 2P-21** Effects of structured loop regions on folding mechanism of DNA G-quadruplex
Minori Nakata, Naoki Kosaka, Daisuke Miyoshi
 FIRST, Konan University
- 2P-22** Development of thymine and uracil specific photo-crosslinking using 4-methyl pyranocarbazole and its application to photo-RNA FISH
Yasuyuki Narita, Jun-ichi Mihara, Siddhant Sethi, Kenzo Fujimoto
 Biofunctional Medical Engineering Research Area, Japan Advanced Institute of Science and Technology
- 2P-23** Synthesis of RNA oligonucleotides having the reduction sensitive 2'-O-protecting groups
Yuya Shinkai, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-24** Control of RNA Foci Formation by Photo-Switchable Ligands
Yusuke Fujiwara¹⁾²⁾, Tomonori Shibata¹⁾²⁾, Chikara Dohno¹⁾²⁾, Kazuhiko Nakatani¹⁾²⁾
 1) SANKEN (The Institute of Scientific and Industrial Research), Osaka University, 2) CREST, JST
- 2P-25** Ring-Opened N7-Deoxyguanosine Adduct of Glycidamide Induces DNA Replication Inhibition and Mutagenesis
Jun-ichi Akagi¹⁾, Masayuki Yokoi²⁾, Young-Man Cho¹⁾, Fumio Hanaoka^{2), 3)}, Kaoru Sugawara²⁾, Shigenori Iwai⁴⁾, Kumiko Ogawa¹⁾
 1) Division of Pathology, National Institute of Health Sciences, 2) Biosignal Research Center, Kobe University, 3) National Institute of Genetics, 4) Graduate School of Engineering Science, Osaka University
- 2P-26** Synthesis and metal ion binding of oligonucleotides having 1, 2-phenylenediamine side chains
Ryuhei Shinoda, Miki Inaba, Kenta Hyugaji, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-27** Development of electrochemical detection of PCR products using 2, 7-dimamino-1, 8-naphthiridine derivatives.
Fumie Takei¹⁾, Sumiyo Hiruma¹⁾, Kaori Kamata¹⁾, Ichiro Yamashita²⁾
 1) Department of Chemistry, National Defense Medical College, 2) Graduate School of Engineering, Osaka University
- 2P-28** Synthesis and deprotection of oligonucleotides without conc. NH₄OH treatment
Kenta Hyugaji, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-29** Role of the DNA scaffold surface in the modulation of enzymatic reactions
Peng Lin, Eiji Nakata, Masahiro Kinoshita, Takashi Morii
 Institute of Advanced Energy, Kyoto University
- 2P-30** Synthesis and Stability of DNA duplexes with disulfide cross-linking
Akihiro Funama, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-31** Synthesis, metal ion binding and structure formation of oligonucleotides containing modified bases
Daiki Kawakami, Yuri Mochizuki, Minori Imamura, Kurumi Ogawara, Takahiro Atsugi, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University

- 2P-32** Synthesis of nucleosides and nucleotides having disulfide side chains
Kenta Iizuka, Takumi Hashizume, Akihiro Funama, Tatsuya Kemmoku, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-33** Synthesis of RNA oligonucleotides containing modified base and sugar residues
Kai Kosugi, Kazuya Yokoi, Yuya Shinkai, Shoji Fujiwara, Akira Ono
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-34** Evaluation of APOBEC-catalyzed cytosine deamination for the repeat DNAs
Luyan Zhang¹⁾, Tomonori Shibata¹⁾, Asako Murata²⁾, Kazuhiko Nakatani¹⁾
 1) Department of Regulatory Bioorganic Chemistry, SANKEN (The Institute of Scientific and Industrial Research), Osaka University, 2) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University
- 2P-35** A mechanism for oxidation-mediated desulphurization and cleavage of phosphorothioated DNA
Kunling Hu¹⁾, Wenhua Sun¹⁾, Ruobing Tang¹⁾, Ran An¹⁾²⁾, Xingguo Liang¹⁾²⁾
 1) College of Food Science and Engineering, Ocean University of China, 2) Laboratory for Marine Drugs and Bioproducts, Qingdao National Laboratory for Marine Science and Technology
- 2P-36** Effect of unmodified gap between two ENA modifications on thermodynamic stability of DNA/RNA duplexes
Tomoka Akita¹⁾²⁾, Elisa Tomita-Sudo²⁾, Shizuka Kōzaki¹⁾²⁾, Renshin Sano¹⁾, Ayumu Kashiwagi¹⁾, Riki Hatakenaka¹⁾, Yoshiyuki Onishi³⁾, Makoto Koizumi³⁾, Junji Kawakami¹⁾²⁾
 1) Department of Nanobiochemistry, FIRST, Konan University, 2) Konan Laboratory for Oligonucleotide Therapeutics, 3) Modality Research Laboratories, Biologics Divisions, Daiichi Sankyo Co., Ltd.
- 2P-37** 3-cyanovinylcarbazole mediated DNA photo-crosslink assisted double duplex invasion for genomic manipulation applications
Ami Shimabara, Yasuha Watanabe, Siddhant Sethi, Kenzo Fujimoto
 Biofunctional Medical Engineering Research Area, Japan Advanced Institute of Science and Technology
- 2P-38** Thermodynamic properties for the specific binding of cationic oligodiaminogalactoses to A-type oligonucleotide duplexes
Hidetaka Torigoe¹⁾, Tomomi Shiraishi²⁾, Rintaro Hara³⁾, Kazuki Sato²⁾, Takeshi Wada²⁾
 1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Medicinal and Life Sciences, Faculty of Pharmaceutical Sciences, Tokyo University of Science, 3) Department of Neurology and Neurological Science, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University
- 2P-39** DNA Origami as a Scaffold to Assemble Membrane Proteins on an Artificial Compartment
Shiwei Zhang, Eiji Nakata, Takashi Morii
 Institute of Advanced Energy, Kyoto University
- 2P-40** Construction of CO₂ fixing enzymes assemblies on 3D DNA nanostructures
Hiroaki Konishi¹⁾, Huyen Dinh¹⁾, Mei Nakabayashi¹⁾, Peng Lin¹⁾, Eiji Nakata¹⁾, Haruyuki Atomi²⁾, Takashi Morii¹⁾
 1) Institute of Advanced Energy, Kyoto University, 2) Graduate School of Engineering, Kyoto University
- 2P-41** Design and synthesis of environmentally sensitive fluorescent 7-deaza-2, 8-diazaadenosine derivatives
Takumi Tsukada, Subaru Kakegawa, Takumi Yamauchi, Yoshio Saito
 Department of Chemical Biology and Applied Chemistry, College of Engineering, Nihon University

- 2P-42** Synthesis, purification, and spectroscopic properties of reduced DNA-Ag(I) nanowires
Hee Ju Park¹⁾, Natsumi Eguchi¹⁾, Jiro Kondo¹⁾, Takahiro Atsugi²⁾, Akira Ono²⁾,
 1) Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University,
 2) Department of Materials and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-43** X-Ray analyses of non-complementary G-A and G-G base pairs responsible for the off-target effects of antisense oligonucleotides
Moena Takahashi, Kana Dodaira, Jiro Kondo
 Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
- 2P-44** Detection of nucleic acids based on the fabrication method of DNA-silver nanostructures
Chiharu Matsumoto, Jiro Kondo
 Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
- 2P-45** Transformer Oligonucleotides (XFO) that induce the formation of specific structural motifs in their target RNA
kaito Mizuno, Sekiguchi Sao, Asaki Hayasaka, Miki Nagashima
 Department of Materials and Life Sciences, Faculty of Science and Technology, Sophia University
- 2P-46** Rapid and reliable sequencing of oligonucleotides using a novel plasma electron detachment dissociation in mass spectrometry
Kaoru Karasawa¹⁾, Takashi Baba²⁾, Eva Duchoslav²⁾
 1) SCIEX, Japan, 2) Sciex, Canada
- 2P-47** Evaluation of the effect of small-molecule binding to mRNA on ribosomal frameshifting in SARS-CoV-2
Asako Murata¹⁾²⁾, Hiyori Fujii²⁾, Risa Anami²⁾, Ayako Sugai²⁾, Kazuhiko Nakatani²⁾
 1) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University,
 2) Department of Regulatory Bioorganic Chemistry, SANKEN, Osaka University
- 2P-48** Synthesis and evaluation of the photo-reactive macrocyclic hexaoxazole probe for selective crosslinking with telomeric G-quadruplex
Kazuki Ynagita¹⁾, Shogo Sasaki¹⁾, Yue Ma¹⁾, Kazunori Ikebukuro¹⁾, Takatsugu Hirokawa²⁾, Masayuki Tera¹⁾, Kazuo Nagasawa¹⁾
 1) Graduate school of Engineering, Tokyo University of Agriculture and Technology,
 2) Division of Biomedical science, University of Tsukuba
- 2P-49** Development of structural selective G-quadruplex ligand with novel G4 ligand screening system
Yoshiki Hashimoto¹⁾, Takeru Torii¹⁾, Natsuki Kinoshita¹⁾, Keiko Kawauchi¹⁾, Hisae Tateishi-Karimata²⁾, Naoki Sugimoto¹⁾²⁾, Daisuke Miyoshi¹⁾
 1) Graduate School of Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University,
 2) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University
- 2P-50** Small molecules regulating RNA-G-quadruplex driven liquid-liquid phase separation
Nagisa Takamiya, Mitsuki Tsuruta, Yoshiki Hashimoto, Keiko Kawauchi, Daisuke Miyoshi
 FIRST, Konan University
- 2P-51** Identify the effect of R-loop on transcriptional regulatory mechanisms
Eito Ichihashi¹⁾, Kazuko Nishikura²⁾, Yusuke Shiromoto²⁾, Michiaki Hamada³⁾, Chao Zeng³⁾, Masayuki Sakurai⁴⁾
 1) Graduate School of Biological Sciences, Tokyo University of Science, 2) The Wistar Institute,
 3) Waseda University Hamada laboratory, 4) Research Institute for Biological Science, Tokyo University of Science

- 2P-52** Single nucleotide polymorphism detection based on the specific binding to form T-Hg-T and C-Ag-C metal-mediated base pair
Kohsei Sekiya¹⁾, Akira Ono²⁾, Hidetaka Torigoe¹⁾
 1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Materials and Life Chemistry, Faculty of Engineering, Kanagawa University
- 2P-53** Left-handed quadruplex nucleic acid formation by the binding of mercury ion to thrombin binding aptamer
Yui Miyahara¹⁾, Kohsei Sekiya¹⁾, Jiro Kondo²⁾, Hidetaka Torigoe¹⁾
 1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Materials and Life Sciences, Sophia University
- 2P-54** Molecular recognition mechanism of the binding between quadruplex nucleic acids and budding yeast quadruplex nucleic acid binding protein
Kazuya Nakamura, Momono Kamegai, Hidetaka Torigoe
 Department of Applied Chemistry, Faculty of Science, Tokyo University of Science
- 2P-55** Liquid-liquid phase separation by the complex formation composed of quadruplex RNA and human heterochromatin protein 1 alpha
Shizuka Tsujii, Nobuyuki Sakuma, Ryunosuke Takahashi, Hidetaka Torigoe
 Department of Applied Chemistry, Faculty of Science, Tokyo University of Science
- 2P-56** Activation of siRNA triggered by copper ion accumulated in cancer cells
Yasuhiro Tomida, Honami Ando, Kunihiko Morihiro, Akimitsu Okamoto
 Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo
- 2P-57** Regulation of functional RNA Activity by complementary DNA strands
Nae Sakimoto¹⁾, Akane Kiyose²⁾, Shuichiro Fujiki²⁾, Riki Hatakenaka²⁾, Junji Kawakami¹⁾²⁾
 1) Konan Laboratory for Oligonucleotide Therapeutics, 2) Department of Nanobiochemistry, FIRS, Konan University
- 2P-58** Aptamer-based photonic sensor using conformational change of nucleic acid
Takuya Yuri, Mitsunobu Nakamura, Tadao Takada
 Department of Applied Chemistry, Graduate School of Engineering, University of Hyogo
- 2P-59** Detection of CpG methylation based on structural change of G-quadruplex forming DNA oligonucleotide and its binding to heme proteins
Shintaro INABA¹⁾, Yudai Kitagawa¹⁾, Kiwako Watanabe¹⁾, Hijiri Hasegawa²⁾, Shusuke Numata³⁾, Kaori Tsukakoshi¹⁾, Wakako Tsugawa¹⁾, Ryutarō Asano¹⁾, Kazunori Ikebukuro¹⁾
 1) Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology, 2) LG Japan Lab Inc., 3) Department of psychiatry, Graduate School of Biomedical science, Tokushima University
- 2P-60** A Novel Real Time PCR for Highly Sensitive and Accurate Detection of KRAS Mutations and SARS-CoV-2 Variants
Masayuki Fujii, Ryosuke Fujita, Mai Ooishi
 Department of Biological and Environmental Chemistry, Faculty of Humanity Oriented Science and Engineering, Kindai University
- 2P-61** Development of sensitive genetic analysis method using signal amplification by dumbbell-shaped molecular beacons bearing silylated pyrene
Tomohisa Moriguchi, Ayana Nagai, Ryu Konoue, Kaoruko Sasaki, Kazuo Shinozuka
 Graduate School of Science and Technology, Gunma University

- 2P-62** Detection of circulating tumor cells using anti-EpCAM aptamer
Yusuke Kitamura¹⁾, Shunpei Sakamoto¹⁾, Haruna Hayashi¹⁾, Yuta Nakashima¹⁾, Keiichiro Yasuda²⁾, Masaaki Iwatsuki³⁾, Seitaro Kumamoto²⁾, Yousuke Katsuda¹⁾, Hideo Baba³⁾, Toshihiro Ihara¹⁾
1) Division of Materials Science, Faculty of Advanced Science and Technology, 2) OGIC Technologies Co., Ltd., 3) Faculty of Life Sciences, Kumamoto University
- 2P-63** Novel exosome-hijacking drug delivery system with avidin-biotin linker system
Shota Oyama, Masafumi Kusumoto, Moeka Hata, Yu Mikame, Tsuyoshi Yamamoto, Asako Yamayoshi
Graduate School of Biomedical Sciences, Nagasaki University
- 2P-64** Controlling the Fluorescence Response of Tripodal Quinone-Cyanine Dyes upon Nucleic Acid Binding
Takashi Sakamoto¹⁾²⁾, Yuka Muraoka¹⁾, Yu Yasuhara²⁾, Marina Iwai²⁾
1) Graduate School of Systems Engineering, Wakayama University, 2) Faculty of Systems Engineering, Wakayama University
- 2P-65** Machine learning assisted classification of small molecules targeting CAG repeat DNA
Qingwen Chen¹⁾, Takeshi Yamada¹⁾, Asako Murata²⁾, Yasuyuki Matsushita³⁾, Kazuhiko Nakatani
1) SANKEN (ISIR), Osaka University, 2) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University, 3) Graduate School of Information Science and Technology, Osaka University
- 2P-66** Guanine photooxidation footprints in DNA and RNA duplexes by diffused singlet oxygen
Takashi Kanamori, Shota Kaneko, Koji Hamamoto, Ruoyu Li, Hideya Yuasa
School of Life Science and Technology, Tokyo Institute of Technology
- 2P-67** Efficient metabolite identification of therapeutic oligonucleotides by high resolution mass spectrometry
Mikio Shirasaki, Masako Okina, Kazunobu Aoyama
Integrated and Translational Science, Axcelead Drug Discovery Partners, Inc.