

JAIMA Discussion on Analytical Science and Technology 2011

- Flash Presentation and Poster Session - International Session, JAIMA Conference, Makuhari Messe, Chiba; September 8, 2011

Odd Numbers **9:30 - 10:45** **Flash presentation 1** **10:45 - 12:15** **Poster session 1**
Even Numbers **13:00 - 14:15** **Flash presentation 2** **14:15 - 15:45** **Poster session 2**

- A001** EFFECT OF POLYMER CONTAINING A NAPHTHYL-ALANINE DERIVATIVE ON THE SEPARATION SELECTIVITY FOR AROMATIC COMPOUNDS IN TEMPERATURE-RESPONSIVE CHROMATOGRAPHY
Akari Nojima¹, Ryosuke Kanazashi¹, Tadashi Nishio¹, Hideko Kanazawa¹, Teruo Okano² (1 Faculty of Pharmacy, Keio University, 2 Institute of Advanced Biomedical Engineering and Sciences, Tokyo Women's Medical University)
- A002** EVALUATION OF SAMPLE PRETREATMENT PROCEDURES FOR THE DETERMINATION OF PHTHALATE ESTERS IN CHILD CARE PRODUCTS AND CHILDREN'S TOYS BY GAS CHROMATOGRAPHY / MASS SPECTROMETRY (GCMS)
Richard Whitney, Jiarui "Jerry" Wang, Clifford M. Taylor (Shimadzu Scientific Instruments, USA)
- A003** DETECTION OF PANAX GINSENG EXTRACTS USING COMPREHENSIVE TWO-DIMENSIONAL LC-MS COUPLED WITH PCA
Tatsunari Yoshida¹, Tsutomu Nishine¹, Hirohisa Mikami¹, Luigi Mondello², Paola Dugo² (1 Shimadzu Corporation, 2 University of Messina)
- A004** MICROCHIP GEL ELECTROPHORESIS OF DNA USING CALCIUM-ALGINATE HYDROGEL
Masahiro Ikawa¹, Kenji Sueyoshi¹, Fumihiko Kitagawa², Koji Otsuka¹ (1 Kyoto Univ., 2 Hirosaki Univ.)
- A005** DIFFERENTIAL ANALYSIS OF NATURAL PRODUCTS USING FAST POLARITY SWITCHING TOFMS ACQUISITION WITH HIGH MASS ACCURACY AND METABOLOMICS-BASED APPROACH
Satoshi Yamaki, Tairo Ogura, Tsutomu Nishine, Hirohisa Mikami (Shimadzu Corporation)
- A006** TOWARD 10,000-FOLD SENSITIVITY ENHANCEMENT FOR OLIGOSACCHARIDE ANALYSIS IN CAPILLARY ELECTROPHORESIS 2
Takayuki Kawai¹, Masumi Ueda¹, Kenji Sueyoshi¹, Fumihiko Kitagawa², Koji Otsuka¹ (1 Kyoto Univ., 2 Hirosaki Univ.)
- A007** PHOSPHATE-AFFINITY ELECTROPHORESIS ON A PDMS MICROCHIP FOR ACTIVITY MEASUREMENTS OF KINASES AND PHOSPHATASES
Aishan Han, Kazuo Hosokawa, Mizuo Maeda (RIKEN, Bioengineering Laboratory)
- A008** DNA SEPARATION BY ENTROPIC EFFECT IN A NANOPILLAR CHIP
Koki Motoyama^{1,2}, Takao Yasui^{1,2}, Noritada Kaji³, Yukihiko Okamoto², Manabu Tokeshi^{1,2}, Yoshinobu Baba^{1,2,4} (1 Department of Applied Chemistry, Nagoya University, 2 FIRST Research Center for Innovative Nanobiodevice, Nagoya University, 3 Graduate School of Science, Nagoya University, 4 National Institute of Advanced Industrial Science and Technology (AIST))
- A009** CONTROL OF CAPILLARY INTRODUCTION OF COATING SOLUTIONS TO GLASS MICROCHANNELS
Kohei Miyazaki^{1,2}, Akihide Hibara^{1,2} (1 Institute of Industrial Science, The University of Tokyo, 2 School of Engineering, The University of Tokyo)
- A010** DEVELOPMENT OF THE MICROFLUIDIC DEVICE TO MEASURE THE DISTRIBUTION BEHAVIOR BETWEEN SUPERCRITICAL CARBON DIOXIDE AND WATER
Akira Ohashi, Masahiro Sugaya, Haeng-Boo Kim (Ibaraki University)
- A011** CHIRAL ICE CHROMATOGRAPHY. WHAT OCCURS IN ICE STATIONARY PHASE
Taiki Shamoto, Yuiko Tasaki, Tetsuo Okada (Tokyo Institute of Technology)
- A012** CHARACTERIZATION OF LIGHT EMITTING DIODES (LEDs) BY UV-VISIBLE SPECTROPHOTOMETRY
Mark Talbott (Shimadzu Scientific Instruments, USA)
- A013** CHARACTERIZATION OF CeF₃/Ag-COATED METALLIC TIPS BY OBSERVATION OF PLASMON RESONANCE SPECTRUM
Saki Miura, Tomonori Nomoto, Masanori Fujinami (Chiba University)
- A014** DEVELOPMENT OF THE SELECTIVE DETECTION METHOD FOR METAL CARBON NANOTUBES BY RESONANCE RAMAN MAPPING WITH THREE WAVELENGTH EXCITATION
Yasushi Nakata, Hiroshi Uchihara (HORIBA Ltd.)
- A015** RESONANCE OF CAPILLARY WAVES IN MICROCHANNELS
Pigot Christian^{1,2}, Hibara Akihide¹ (1 LIMMS/CNRS, The University of Tokyo 2 Institut of Industrial Sciences, The University of Tokyo)
- A016** COMBINATION ANALYSIS OF THE BILIARY CALCULI BY USING NIR-RAMAN MICROSCOPY AND X-RAY ANALYTICAL MICROSCOPE
Tomoko Numata¹, Yasushi Nakata, Satoru Tanaka¹, Hiroshi Uchihara¹, Norio Miyoshi² (1 Horiba Ltd., 2 Univ. Fukui)
- A017** FABRICATION OF 'CALDERA' MIRROR FOR OPTICAL MICRO CHEMICAL CHIPS
Yuto Kazama^{1,2}, Akihide Hibara^{1,2} (1 Institute of Industrial Science, The University of Tokyo 2 School of Engineering, The University of Tokyo)
- A018** DEVELOPMENT OF CAPILLARY CONDENSER LENS FOR X-RAY IMAGING MICROSCOPY
Sumito Ohzawa¹, Tomoki Aoyama¹, Katashi Kiyohara¹, Shintaro Komatani¹, Yoshio Suzuki², Akihisa Takeuchi², Yasuko Terada², Hiromoto Nakazawa³ (1 HORIBA Ltd., 2 JASRI, 3 Tohoku Univ.)
- A019** LIGHT-INDUCED CAPILLARY MICROFLOW OF PHOTORESPONSIVE LIQUID
Marie Harada^{1,2}, Mao Fukuyama², Kae Sato¹, Akihide Hibara² (1 Japan Women's University, 2 Institute of Industrial Science, The University of Tokyo)
- A020** CHARACTERIZATION OF WATER / WATER AND THF/ WATER OPTICAL WAVEGUIDES BY COMPUTATIONAL FLUID DYNAMICS CALCULATION
Junya Kamiyama¹, Souto Asanuma¹, Hiromi Takiguchi³, Hiroki Hotta², Kin-ichi Tsunoda¹, Yasuhiko Sugii³ (1 Univ. Gunma, 2 Univ. Nara Education, 3 Univ. Tokyo)
- A021** IMPROVEMENT OF FINGER-SIZED ATOMIC EMISSION DETECTOR ON CAPILLARY GC
Daiki Tamahashi, Hizuru Nakajima, Katsumi Uchiyama (Tokyo Metropolitan University)
- A022** ANALYSES OF ADSORPTION STATE OF DYE MOLECULES ONTO GLASS AND TiO₂ SURFACE BY LINER DICHROISM MEASUREMENT SYSTEM USING SLAB OPTICAL WAVEGUIDE
Atsushi Sakurazawa¹, Hiroki Hotta², Kin-ichi Tsunoda¹, Keisuke Suda¹, Kenji Kakiage¹, Minoru Hanaya¹, Teruo Hinoue³ (1 Univ. Gunma, 2 Univ. Nara Education, 3 Univ. Shinsyu)
- A023** QUASI-ELASTIC LIGHT SCATTERING MEASUREMENTS OF IONIC LIQUID SURFACES CONTACTING WITH CHLOROFORM VAPOR AND THEIR MULTIVARIATE ANALYSIS
Koichiro Seki^{1,2}, Akihide Hibara^{1,2} (1 School of Engineering, Univ. Tokyo, 2 Institute of Industrial Science, Univ. Tokyo)
- A024** DEVELOPMENT OF SLAB OPTICAL WAVEGUIDE FLUORESCENCE MICROSCOPY SYSTEM AND ITS

APPLICATION TO THE OBSERVATION OF THE REACTIONS OF GRAMICIDIN ANALOGS WITH PLANAR SUPPORTED LIPID BILAYERS

Yuki Saito¹, Takahiro Sakurai¹, Akiko Ieiri¹, Toshitada Yoshihara¹, Seiji Tobita¹, Keiichi Yamada, Hiroki Hotta², Kiichi Sato¹, Kin-ichi Tsunoda¹ (1 Univ. Gunma, 2 Univ. Nara Education.)

- A025** ELECTROCHEMICAL PROPERTIES OF RUTHENIUM COMPLEXES ASSEMBLED ON AMINO CORE DENDRIMER
Yurie Kuroki, Hiroyuki Minesaka, Takeshi Hasimoto, Akira Endo and Takashi Hayashita (Sophia University)
- A026** MEASUREMENT METHODS FOR EVALUATION OF SOLAR CELL COMPONENTS BY UV-VIS-NIR SPECTROPHOTOMETER
Jun Horigome¹, Koji Kurita¹, Yuka Iwaya², Toshihiro Shirasaki¹ (1 Hitachi High-Technologies Corporation 2 Hitachi High-Tech Control Systems Corporation)
- A027** SINGLE MOLECULAR ANALYSIS OF GLYCANS USING A SOLID STATE NANOPORE
Makoto Takemasa, Masahiro Fujita, Mizuo Maeda (Bioengineering Lab., RIKEN)
- A028** DEVELOPMENT OF ELECTROCHEMICAL DETECTION SYSTEM BY USING MAGNETIC MICROBEAD
Naoki Shibutani, Tomoyuki Okada, Hiroshi Shiigi, Tsutomu Nagaoka (Osaka Pref. Univ.)
- A029** MEASUREMENT OF LIQUID FLOW RATE AND PRESSURE DROP IN EXTENDED NANOCHANNEL
Sho Kubori¹, Yutaka Kazoe², Yasuhiko Sugii², Kazuma Mawatari², Takehiko Kitamori^{1,2} (1 Department of Bioengineering, School of Engineering, The University of Tokyo 2 Department of Applied Chemistry, School of Engineering, The University of Tokyo)
- A030** ELECTROCHEMICAL CATALYTIC ACTIVITY OF POLYANILINE-AuNPs HYBRIDS FOR REDUCTION OF OXYGEN
Yusuke Muranaka, Hisashi Morishita, Hiroshi Shiigi, Tsutomu Nagaoka (Osaka Pref. Univ.)
- A031** DESIGN AND FUNCTION OF 2,2'-BISPYRIDYLMETHYLAMINO FLUORESCENT PROBE/CYCLODEXTRIN COMPLEX SENSORS IN WATER
Mariko Samizo, Keiko Ogura, Takeshi Hashimoto, Takashi Hayashita (Sophia Univ.)
- A032** ACCURATE pH MEASUREMENT OF DILUTE SULFURIC ACID SOLUTIONS WITH THE GLASS ELECTRODE COMBINED WITH THE REFERENCE ELECTRODE EQUIPPED WITH THE IONIC LIQUID SALT BRIDGE
Manabu Shibata¹, Makoto Kato¹, Hirofumi Imai¹, Hideaki Sakaida², Takashi Kakiuchi² (1 R&D center, HORIBA, Ltd., 2 Univ. Kyoto)
- A033** DESIGN OF PODAND FLUOROPHORE/CTA MEMBRANE SENSORS FOR SELECTIVE LEAD(II) ION RECOGNITION
Aya Yamasawa, Naoki Tomita, Takeshi Hasimoto and Takashi Hayashita (Sophia University)
- A034** ON-LINE MONITORING SYSTEM FOR TRACE COPPER(II) IN CONCD ALKALINE SOLUTIONS BY ANODIC STRIPPING VOLTAMMETRY WITH MICROPOROUS MEMBRANE ELECTRODES
Osamu Watanabe¹, Toru Hisamatsu¹, Hitoshi Mizuguchi¹, Masamitsu Iiyama² (1 Yamagata University, 2 Nomura Micro Science Co. Ltd.)
- A035** ALL-INKJET-PRINTED FABRICATION METHOD FOR "PAPERFLUIDIC" COLORIMETRIC & ELECTROCHEMICAL SENSING DEVICES
Kento Maejima¹, Toshiharu Enomae¹, Akira Isogai¹, Koji Suzuki², Daniel Citterio² (1 University of Tokyo, 2 Keio University)
- A036** NEW FLAT ISFET pH SENSOR FOR DIRECT SOLID-SURFACE MEASUREMENT
Hisashi Yamanouchi, Koji Ueda (Advanced R&D Center, HORIBA, Ltd.)
- A037** DEVELOPMENT OF HIGHLY DURABLE RATIO-METRIC OPTICAL pH SENSOR
Naoto Yoshizawa, Yuki Hiruta, Daniel Citterio, Koji Suzuki (Univ. Keio)
- A038** RAPID DETECTION OF SURFACE ANTIGENS ON LIVING CELLS BY THE DISTINCT POSITIONING OF CELLS WITH DIELECTROPHORESIS
Tomoyuki Yasukawa^{1,2}, Hironobu Hatanaka¹, Fumio Mizutani¹ (1 University of Hyogo, 2 JST CREST)
- A039** PAPER-BASED COLORIMETRIC GAS SENSOR ARRAY FOR DETECTION OF AMMONIA AND AMINES USING INKJET-PRINTED POLYMER NANOPARTICLES
Tamaki Soga, Yusuke Jimbo, Daniel Citterio, Koji Suzuki (Univ. Keio)
- A040** DEVELOPMENT OF TEMPERATURE-ACTUATED MICROVALVE
Toyohiro Naito^{1,2}, Rengchai Arayanarakool³, Noritada Kaji⁴, Yukihiko Okamoto², Manabu Tokeshi^{1,2}, Séverine Le Gac³, Albert van den Berg³, Yoshinobu Baba^{1,2,4} (1 Department of Applied Chemistry, Nagoya University, 2 FIRST Research Center for Innovative Nanobiodevice, Nagoya University, 3 BIOS, THE Lab-on-a-Chip Group, MESA+ Institute for Nanotechnology, University of Twente, THE NETHERLANDS, 4 Graduate School of Science, Nagoya University, 5 National Institute of Advanced Industrial Science and Technology (AIST))
- A041** AN IMPROVED NMR TECHNIQUE FOR ANALYSIS OF ADDITIVES IN POLYMER SAMPLES
Michal Malon¹, Yu Tsutsumi¹, Satoshi Sakurai¹, Takako Suematsu¹, Masaaki Toda², Akiko Amemiya², Hiroaki Utsumi¹ (1 JEOL Resonance Inc. 2 Dainippon Ink and Chemicals Inc.)
- A042** PORTABLE DNA DETECTION SYSTEM USING SEGMENT-FLOW PCR
Hidenori Nagai¹, Yusuke Fuchiwaki¹, Masato Saito², Eiichi Tamiya² (1 AIST, 2 Osaka Univ.)
- A043** OPEN-VOLUME TYPE DEFECTS ANALYSIS BY POSITRON AND ITS MICROPROBE
Shigehiro Nojiri, Kyosuke Yanagi, Yusuke Kubo, Shuntaro Minei, Masanori Fujinami (Chiba University)
- A044** PRINTABLE PHOTONICS-BASED LABEL-FREE SINGLE STEP BIOSENSOR
Tatsuro Endo, Hideaki Hisamoto (Osaka Prefecture University)
- A045** DEVELOPMENT OF aL SCALE LIQUID HANDLING METHOD IN EXTENDED NANOSPACE
Shogo Kubota¹, Kazuma Mawatari¹, Yan Xu², Takehiko Kitamori¹ (1 The University of Tokyo, 2 Osaka prefecture University)
- A046** SIMPLIFICATION OF THE OPERATION STEPS OF ELISA USING A CAPILLARY SENSOR IMMOBILIZING CAPTURE ANTIBODY AND ENZYME-LABELED ANTIBODY
Erina Tsutsumi, Terence G. Henares, Shun-ichi Funano, Tatsuro Endo, Hideaki Hisamoto (Osaka Prefecture University)
- A047** ION TRANSFER AT MICROSCOPIC LIQUID INTERFACES DURING DROPLET GENERATION
Mao Fukuyama¹, Jan C. T. Eijkel², Albert van den Berg², Yumi Yoshida³ and Akihito Hiyama¹ (1 Institute of Industrial Science The University of Tokyo, 2. MESA+ Institute of Nanotechnology, University of Twente 3. Department of Chemistry, Kyoto Institute of Technology)
- A048** BIOLUMINESCENT INDICATORS FOR ILLUMINATING STEROID HORMONES
Sung-Bae Kim, Hiroaki Tao (AIST)
- A049** FAST GC ANALYSIS AND ACCURATE MASS MEASUREMENT OF POPs BY USING A GAS CHROMATOGRAPH – HIGH RESOLUTION TIME-OF-FLIGHT MASS SPECTROMETER
Jun Onodera, Masaaki Ubukata, Kouji Okuda and Yoshihisa Ueda (JEOL Ltd.)
- A050** LABEL-FREE DETECTION OF DNA MOLECULES IN NANOWALL ARRAYS
Takao Yasui^{1,2}, Noritada Kaji³, Yukihiko Okamoto², Manabu Tokeshi^{1,2}, Yasuhiro Horiike⁴ and Yoshinobu Baba^{1,2,5} (1 Department of Applied Chemistry,

- A051** STRUCTURAL ANALYSIS OF COMPLEX LIPIDS USING MALDI-TOF-TOF TANDEM MS WITH HIGH PRECURSOR-ION SELECTIVITY
Ayumi Kubo, Yoshiyuki Itoh, Masahiro Hashimoto, Jun Tamura, Jyun Onodera (JEOL Ltd.)
- A052** HYBRID FLOW ANALYSIS SYSTEM FOR URINARY VANADIUM/CREATININE RATIO
Norio Teshima¹, Nuanlaor Ratanawimarnwong², Duangjai Nacapricha³, Tadao Sakai¹ (1 Dept. Applied Chem., Aichi Inst. Tech., 2 Dept. Chem., Srinakharinwirot Univ., Thailand 3 Dept. Chem., Mahidol Univ. Thailand)
- A053** ATMOSPHERIC SEM OBSERVES SAMPLES IN LIQUID
Mitsuo Suga¹, Yuuzi Konyuba¹, Hidetoshi Nishiyama¹, Shinnosuke Iwamatsu², Yoshiyuki Watanabe², Chikara Sato³ (1 JEOL Ltd., 2Yamagata Research Institute of Technology, 3Biomedical Research Institute, AIST)
- A054** HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY ANALYSIS OF POLYPHENOLS
Ayako Matsuzaki¹, Chihiro Yoshioka¹, Masako Ishikawa², Katsutoshi Shimizu², Hiroaki Nakagawa¹, Kosaku Toyosaki¹ (1 Hitachi High-Technologies Corporation, 2 Hitachi High-Tech Control Systems Corporation)
- A055** THERMAL LENS MICROSCOPY FOR *in vivo* DISTRIBUTION MEASUREMENT OF CAROTENOID IN CELLS
Mayumi Yoshida¹, Akinori Katabami¹, Tomonori Nomoto¹, Taro Toyota², Daisuke Umeno¹, Masanori Fujinami¹(1 Faculty of Engineering Chiba Univ., 2 Graduate School of Arts and Sciences, Univ.Tokyo)
- A056** ULTRA LOW LEVEL DETERMINATION OF BISPHENOL A AND POLY AROMATIC HYDROCARBONS IN RIVER WATER USING COLUMN-STITCHING HPLC WITH FLUORESCENCE DETECTION
Yoshiyuki Watabe¹, Takashi Hine¹, Tetsuya Tanigawa², Takuya Kubo², Ken Hosoya³ (1 Shimadzu Corporation, 2 Graduate school of Tohoku University, 3 Graduate School of Kyoto Prefectural University)
- A057** PROTEOME ANALYSIS OF BRAIN TISSUES BY FLUOROGENIC DERIVATIZATION-LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETRY (FD-LC-MS/MS) METHOD
Hiromichi Asamoto¹, Hiroaki Minamisawa¹, Kazuhiro Imai² (1 College of Industrial Technology, Nihon University, 2 Research Institute of Pharmaceutical Sciences, Musashino University)
- A058** SEPARATION OF ALUMINUM SPECIES IN CAMELLIA PLANT SAMPLES AND SPECIATION ANALYSIS FOR ALUMINUM BY ELECTROSPRAY IONIZATION MASS SPECTROMETRY
Kazuki Shimotori¹, Masaomi Kitazume¹, Hiroki Hotta², Kiichi Sato¹, Kin-ichi Tsunoda¹ (1 Univ. Gunma, 2 Univ. Nara Education)
- A059** BIOLUMINESCENCE ANALYSIS FOR QUANTITATIVELY MONITORING G-PROTEIN COUPLED RECEPTORS USING SPLIT LUCIFERASE COMPLEMENTATION
Mitsuru Hattori¹, Naomi Misawa¹, Kafi A.K.M^{1,2}, Takeaki Ozawa¹ (1 Tokyo Univ., 2 Univ.Sydney)
- A060** ANALYSIS OF LEACHATE Cu FROM SEDIMENT AT AN ABANDONED MINE SITE BY HANDY-TYPE LIQUID ELECTRODE PLASMA ATOMIC EMISSION SPECTROMETER
Takashi Yamamoto, Ayumi Yamashita, Akira Yukumoto, Shoji Imai (Univ. Tokushima)
- A061** DEVELOPMENT OF A FULL-LENGTH GFP-TAGGED mRNA PROBE FOR LIVE CELL IMAGING
Hideaki Yoshimura¹, Asumi Inaguma², Takeaki Ozawa¹ (1 Univ of Tokyo, 2 The Graduate Univ. for Advanced Studies)
- A062** AUTOMATED ACID GAS MONITOR WITH PARALLEL PLATE WET DENUDER
Masaki Takeuchi¹, Yuki Miyazaki², Hiromichi Tsunoda², Hideji Tanaka¹ (1 Institute of Health Biosciences, The University of Tokushima, 2 Graduate School of Pharmaceutical Sciences, The University of Tokushima)
- A063** VISUALIZATION OF NONENGINEERED SINGLE mRNAs IN LIVING CELLS USING EGFP RECONSTITUTION PROBES
Toshimichi Yamada¹, Hideaki Yoshimura¹, Asumi Inaguma², Takeaki Ozawa¹ (1 The University of Tokyo, 2 The Graduate University for Advanced Studies)
- A064** REMOVAL OF BORON BY THE HYDROXYAPATITE FORMATION REACTION
Eishi Yoshikawa¹, Atsushi Sasaki², Masatoshi Endo¹ (1 Graduate School of Science and Engineering, Univ. Yamagata, 2 Technical Division of Instrumental Analysis, Faculty of Engineering, Univ. Yamagata)
- A065** MICRORNA DETECTION IN THIRTY MINUTES USING GOLD NANOPARTICLES ON POWER-FREE MICROFLUIDIC CHIP
Hiroshi Komatsu^{1,2}, Hideyuki Arata¹, Aishan Han¹, Kazuo Hosokawa¹ and Mizuo Maeda^{1,2} (1 RIKEN, 2 the University of Tokyo)
- A066** FABRICATION AND ELECTROCHEMICAL PROPERTIES OF GRAPHENE COATED MICROCHIP GOLD ELECTRODES
Yuko Ueno¹, Kazuaki Furukawa², Hiroki Hibino², Emi Tamechika¹ (1 NTT Microsystem Integration Labs., 2 NTT Basic Research Labs.)
- A067** IMAGING SPATIOTEMPORAL DYNAMICS OF HYDROGEN PEROXIDE IN THE PLASMA MEMBRANE OF MIGRATING CELLS
Hideyuki Suzuki, Moritoshi Sato (Univ. Tokyo)
- A068** PREPARATION OF OVEROXIDIZED POLYPYRROLE FILM FOR BIOMOLECULAR RECOGNITION
Shiho Tokonami, Yu Nakadoi, Kenta Saimatsu, Hiroshi Shiigi, Tsutomu Nagaoka (Osaka Prefecture University)
- A069** FLUORESCENT PROBES FOR SUPERRESOLUTION IMAGING OF PROTEIN-PROTEIN INTERACTIONS IN LIVING CELLS
Wataru Ichimiya, Takahiro Nakajima, Moritoshi Sato (Graduate School of Arts and Sciences, The University of Tokyo)
- A070** NOVEL SYNTHESIS OF Au/Ag BIMETALLIC NANOPARTICLES FOR OXIDATION CATALYST
Taichi Hamada¹, Keisuke Kawashima², Naoki Toshima², Shiho Tokonami¹, (1 Osaka Prefecture University, 2 Tokyo University of Science Yamaguchi)
- A071** FEMTOLITER MICRODROPLET ARRAY DEVICE FOR DIGITAL COUNTING OF SINGLE-BIOMOLECULES
Soo Hyeon Kim^{1,2}, Ryota Iino^{1,2}, Suguru Araki^{2,3}, Shouichi Sakakihara³ and Hiroyuki Noji^{1,2} (1University of Tokyo, 2 CREST, JST, 3 Osaka University)
- A072** INVERSE PHOTOELECTRON HOLOGRAPHY: DEPENDENCY OF INCIDENT ELECTRON ENERGY FOR THIN FILM MEASUREMENT
Akio Uesaka¹, Kouichi Hayashi², Tomohiro Matsushita³, Shigetoshi Arai¹ (1 HORIBA, Ltd., 2 IMR Tohoku Univ., 3 JASRI)
- A073** EVALUATION OF MULTIDRUG EFFLUX PUMP INHIBITORS BY A NEW METHOD USING MICROFLUIDIC CHANNELS
Ryota Iino^{1,2}, Yoshimi Matsumoto³, Kohei Hayama³, Shouichi Sakakihara³, Kunihiko Nishino³, Hiroyuki Noji^{1,2}, Akihito Yamaguchi³ (1 Univ. of Tokyo, 2 CREST, 3 Osaka Univ.)
- A074** THICKNESS MEASUREMENT OF MICRO REGION IN THE SEMICONDUCTOR PROCESS WITH X-RAY ANALYTICAL MICROSCOPE (XGT)
Hitomi Ohno, Satoko Nishikawa, Jun Hirose, Sumiyo Ishikawa, Kazuo Nishihagi (1 HORIBA, Ltd.)
- A075** REACTION ANALYSIS IN EXTENDED-NANO SPACE BY A NMR SPECTROSCOPY AND ENHANCEMENT OF DIELS-ALDER REACTIVITY OF CYLOPENTADIENE

- Shota Yoshioka, Kazuma Mawatari, Takehiko Kitamori (The University of Tokyo)
- A076** A STUDY OF NANO SIZE STANDARD MATERIAL VALIDATION BY THE PHOTON CORRELATION SPECTROSCOPY (PCS) METHOD
Satoru Tanaka, Kazuto Sakai, Makoto Umezawa, Tetsuji Yamaguchi, and Tatsuo Igushi (Horiba Ltd.)
- A077** FORMATION OF AQU/ORG TWO PHASE PARALLEL FLOW IN EXTENDED-NANOCHANNEL
Hiroto Akaike, Yutaka Kazoe, Yasuhiko Sugii, Kazuma Mawatari, Takehiko Kitamori (University of Tokyo.)
- A078** DETERMINATION OF OXYGEN AND CARBON IN SILICON FOR SOLAR CELLS
Seiji Sakakura, Hiroshi Uchihara (Horiba Ltd.)
- A079** INVESTIGATION INTO CONCENTRATION THRESHOLD OF LIPOSOME SOLUBILIZATION WITH VARIOUS SURFACTANTS
Yuri Shoji, Takashi Igarashi, Kenji Katayama (Chuo-Univ.)
- A080** MICROBORE MONOLITHIC MICROREACTOR FOR HIGH SPEED SUZUKI-MIYAUURA CROSS-COUPPLING REACTION
Akhammad Sabarudin, Shin Shu, Tomonari Umemura (EcoTopia Science Institute, Nagoya University)
- A081** FABRICATION OF TEMPERATURE RESPONSIVE SURFACE AND ITS APPLICATION TO BIO-ANALYTICAL CHEMISTRY
Ying Weng, Hulie Zeng, Hizuru Nakajima, Katsumi Uchiyama (Tokyo Metropolitan University)
- A082** DEVELOPMENT OF ANODIZED NANOPOROUS TIN-OXIDE FILM ELECTRODE
Akira Yamaguchi¹, Teruhiko Iimura², Hiroki Matsumoto², Kazuhiro Hotta², Norio Teramae² (1 Ibaraki Univ., 2 Tohoku Univ.)
- A083** APPROACH FOR CHARACTERIZATION OF SURFACE REACTION ON ALKANETHIOL MOLECULES CHEMISORBED ON GOLD NANOPARTICLES BY USING LASER DESORPTION IONIZATION MASS SPECTROMETRY
Keishiro Nagoshi, Kohei Shibamoto, Takashi Korenaga (Tokyo Metropolitan University)
- A084** FACILE ELECTRON TRANSFER BETWEEN SINGLE MOLECULES MEDIATED BY COORDINATION BONDS
Bui Tan Phuc, Tomoaki Nishino (Osaka Prefecture University)
- A085** HIGH QUALITY SECTIONS OF LOW MELTING POINT SAMPLES PREPARED WITH CRYO ION SLICER - BROAD Ar ION BEAM MILLING APPARATUS WITH A NEWLY DEVELOPED SPECIMEN COOLING UNIT
Y Nakajima, M Shibata, H Matsushima, T Suzuki (JEOL Ltd, Japan)
- A086** DEVELOPMENT OF A THERMOSTABLE BILIRUBIN OXIDASE ELECTRODEPOSITED ELECTRODE AND ITS APPLICATION OF BIOFUEL CELL CATHODE
Toshio Watanabe¹, Yohei Yamada¹, Haruhiko Sakuraba², Mikito Yasuzawa¹, Tomoki Yabutani¹ (1 Univ. Tokushima, 2 Kagawa Univ.)
- A087** STUDY OF PROVENANCE OF RIVER SEDIMENTS: APPLICATIONS OF ESR AND TLCs
Aiko Shimada (JEOL RESONANCE Inc.)
- A088** THE PERFINITY WORKSTATION: ACHIEVING QUALITY THROUGH AUTOMATION
Rachel A. Lieberman¹, Curtis Campbell¹, Nick Herold², Kevin Meyer², Fred Regier² (1 Shimadzu Scientific Instruments, USA, 2 Perfinity Biosciences, USA)
- A089** STUDY FOR A MECHANISM OF NEUTRAL SUGER CHAIN FRAGMENTATIONS IN LASER DESORPTION/IONIZATION MASS SPECTROMETRY ON TITANIA SURFACE
Takashi Fujita, Kohei Shibamoto, Takashi Korenaga (Tokyo Metropolitan University)
- A090** DIFFERENTIAL ANALYSIS IN POLYSULFIDE SILANE COUPLING AGENTS BY HIGH MASS ACCURACY MSⁿ AND MULTIVARIATE STATISTICAL TECHNIQUE
Takahiro Goda, Hiroki Nakajima, Satoshi Yamaki, Tsutomu Nishine (Shimadzu Corporation)
- A091** DEVELOPMENT OF SPRAY IONIZATION METHOD USING CATIONIZATION IN NON-POLAR SOLVENT: UPGRADING TO SENSITIVE ASSAY BY APPLICATION OF ELECTROSPRAY.
Naoto Niizuma¹, Atsushi Takamizawa^{1,2}, Takashi Korenaga¹ (1 Tokyo Metropolitan University, 2 Japan Science and Technology Agency)
- A092** SIMPLIFIED MEASUREMENT OF PARTITION COEFFICIENT BY MEANS OF THE PRETREATMENT FUNCTION IN THE AUTO-SAMPLER
Keiko Yamabe, Yusuke Osaka, Yoshiaki Maeda, Junichi Masuda, Masatoshi Takahashi, Yoshihiro Hayakawa (Shimadzu Corporation)
- A093** FEMTOSECOND TIME-RESOLVED MASS SPECTROMETRY FOR THE DESORPTION PROCESS TETRACENE IONS FROM TETRACENE-DOPED ANTHRACENE CRYSTALS
Yuuki Minegishi, Daisuke Morimoto, Jun Matsumoto, Tatsuya Fujino, Haruo Shiromaru, Kenro Hashimoto, Takashi Korenaga (Tokyo Metropolitan Univ.)
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- A095** NANO SECOND IR-UV TIME-RESOLVED MASS SPECTROMETRY FOR THE PROTON TRANSFER MECHANISM IN MALDI
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- A100** DYNAMIC RANGE IMPROVEMENT IN SIMULTANEOUS ANALYSIS OF AMINO ACIDS USING FAST-GC/MS
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