

## Poster SessionII

September 29 (Sun), 11:00-12:30

### 【Inorganic/Analytical/Environmental Chemistry】

2P001 UV, Visible and Near-infrared Lights Photocatalytic Activity of (Yb,Er)-NaYF<sub>4</sub>/C-TiO<sub>2</sub> Composite

○Xiaoyong Wu, Shu Yin, Qiang Dong, Chongshen Guo, Tsugio Sato

2P002 Solvothermal synthesis and gas sensing property of tin oxide

○Kimie Imakawa, Makoto Hamanaka, Qiang Dong, Shu Yin, Tsugio Sato

2P003 Morphological control and characterization of fluoride upconversion material by liquid methods

○Yohei Suzuki, Kentaro Abe, Qiang Dong, Shu Yin, Tsugio Sato

2P004 Solvothermal Synthesis and Characterization of Vanadium Dioxide Particles

○Hisaya Hama, Qiang Dong, Shu Yin, Tsugio Sato

2P005 Flow injection/anodic stripping voltammetry for the detection of ultra-trace mercury(II) by using track-etched microporous membrane electrodes

○Kentaro Numata, Chiaki Monma, Hitoshi Mizuguchi, Masamitsu Iiyama, Kazuhiro Tachibana, Tatsuo Nishina, Junichi Shida

2P006 N-Functionalised cyclen derivatives as linkers in electrocatalysts

○Ramjee Kandel, Brian K. Breedlove, Masahiro Yamashita

2P007 Study for Magnetic Properties of Alternating Chain with Canted Antiferromagnetic Interaction Composed of Carboxylate-Bridged Mn(III)salen Complex

○Yoshitaka Aono, Koichi Kagesawa, Masahiro Yamashita

2P008 Conformational Analysis of Dinuclear Zinc(II) Complexes for the Purpose of Improving Aminopeptidase Activity

○Shintaro Ishiyama, Hiroshi Sakiyama

2P009 Zero-field splittings of dinuclear nickel(II) complex and nickel(II)-doped dinuclear zinc(II) complex

○Yukako Chiba, Mikio Yamasaki, Masahiro Mikuriya, Jurek Krzystek, Hiroshi Sakiyama

2P010 Purification of a Protein – Modified Gold Nanoparticle by Gel Filtration Chromatography

○Hitoshi Iwasaki, Kazuhiko Fujiwara, Nobuaki Ogawa

2P011 Effect of a Chemical Functionalization for Cytotoxicity of Gold Nanoparticle

○Yuki Nagano, Kazuhiko Fujiwara, Nobuaki Ogawa

2P012 Introduction of a Peptide Functionalized Gold Nanoparticle into a Biological Cell Probed by

## Confocal Light Scattering Microscopy

○Takuya Odashima, Yoshinobu Hinobori, Kazuhiko Fujiwara, Nobuaki Ogawa

2P014 Magnetic behaviors of the multiple-decker complexes at relatively high temperature.

○Yoji Horii, Keiichi Katoh, Brian. K Breedlove, Shinya Takaishi, Masahiro Yamashita

2P015 Control of the Redox Potentials of Pyrroloquinolinequinone (PQQ) by Ru<sup>II</sup> Coordinations

○Hiroumi Mitome, Tomoya Ishizuka, Hiroaki Kotani, Takahiko Kojima

2P016 Complete Photochromic Interconversion of Bistable Ruthenium(II)-Diimine Complexes

○Takuya Sawaki, Tomoya Ishizuka, Masaki Kawano, Yoshihito Shiota, Kazunari Yoshizawa, Takahiko Kojima

2P017 Mechanistic Insights into Substrate Oxidations by Ruthenium(IV)-Oxo Complexes

○Shingo Ohzu, Tomoya Ishizuka, Yuichirou Hirai, Hiroaki Kotani, Shunichi Fukuzumi, Takahiko Kojima

2P018 The Chemicals Management in Educational Institutions that Utilize the e-learning system

○Takumi Kobayashi, Kazuhiro Tachibana, Tomohiro Ito, Tatsuo Nishina

2P019 Surface modification of track-etched microporous membrane electrodes by electrochemical reduction of diazonium cations

○Shinya Sato, Tomomi Sato, Genki Hayakawa, Hitoshi Mizuguchi

2P020 Synthesis of Si-Ge solid solutions from Na-Si-Ge compounds

Kenji Momma, ○Haruhiko Morito, Hisanori Yamane

2P021 Removal of heavy metals using chitosan coated carbon materials

○Ayana Onodera, Norifumi Terui

2P022 Bioconjugation of Tb(III)-Thiacalixarene Complex with Proteins Analyzed with Capillary Electrophoresis

○Ryo Baba, Hitoshi Hoshino, Nobuhiko Iki

2P023 Determination of Cd(II) by Self-assembly of a Luminescent Cd(II)-Tb(III)-Thiacalix[4]arene Ternary Complex and the Application to Real Samples

○Norioki Abe, Nobuhiko Iki, Hitoshi Hoshino

2P024 Development of a Fluorometric Determination Method for Beryllium(II) by Fluorescence of Beryllium(II)-Apigenin Complex Enhanced by Cationic Surfactant Micelle

○Ryunosuke Karashimada, Nobuhiko Iki, Hitoshi Hoshino

2P025 Determination of Acid Phosphatase Activity by L-Tyrosine Chemiluminescence Enhanced in Micellar Solution

○Chikai Igarashi, Hitoshi Hoshino

2P026 Preparation of apatite-type silicate supported noble metal catalysts for hydrocarbon combustion

○Sumio Kato, Atsunori Ono, Masataka Ogasawara

2P027 Influence of synthesis and sintering conditions on ability of visible light reactive photocatalyst of Ce-Zr composite oxide

○Hiroshi Kanehama, Misato Kimura, Haruka Kuwata, Takayuki Kohirumaki

2P028 Synthesis and characterization of metal-complex from polypyridylmethanes

○Yuya Tsunozumi, Shinya Hayami, Kouzou matsumoto, satoshi kawata

2P029 Highly transparent clay films consisting of a stevensite and fluorescent organic dyes

○Makoto Tominaga, Yasutaka Suzuki, Ryo Tsunashima, Jun Kawamata

2P030 Chemical decomposition of phenolic resources

Taichi Sugeno, ○Takuya Takahashi, Hideyuki Tagaya

2P031 Preparation of glutathione-imprinted silica gel using the amino-functionalized precursor and nickel ions

○Yuuki Watanabe, Tateyuki Saitoh, Fumihiko Kitagawa, Isoshi Nukatsuka

2P032 Development of radioactive cesium removal system of incineration fly ash

○Shuji Uchida, Shigekatsu Oshite, Masahide Hagiri, Masaru Oshiro, Takaomi Kobayashi

2P033 Redox properties of imidazolate-bridged dinuclear complexes [Ru-M](M = Mn, Co, Ni, Cu)

○Yuya Kawai, Masayuki Nihei, Hiroki Oshio

2P034 Valence State Controlled Nonanuclear [3 x 3] Grid-Shaped Complexes

○Hiroki Sato, Takuya Shiga, Graham Neil Newton, Hiroki Oshio

2P035 Symmetry control of the  $[M^{II}_3(\mu_3-O/OH)]^{n+}$  triangle core in pentanuclear cluster helicates

○Nagisa Katsuta, Tsubasa Washizaki, Akira Fuyuhiko, Masaaki Ohba, Shinya Hayami, Satoshi Kawata

2P036 Novel reactions of TCNE: formation of supramolecular structures by reaction with self-assembled  $M_2$ -bpypz systems.

○Midori Furushou, Nagisa Katuta, Tubasa Wasizaki, Akio Misina, Yumi Hamatake, Akira Fuyuhiko, Sinnya Hayami, Satosi Kawata

2P037 Synthesis of MFI zeolites with control of the acidity and their catalytic activities on DTO reaction

○Hiroki Kobayashi, Masafumi Nakaya, Kiyoshi Kanie, Atsushi Muramatsu

2P038 Synthesis of Pd-Containing Amphiphilic Molecules and Its Pseudotaxane Formation with Cyclodextrins

○Yuji Suzaki, Hirotaka Endo, Kohtaro Osakada

2P039 Enhanced fluorescent quantum efficiencies of acetylene derivatives intercalated in clay minerals

○Shuheji Mochida, Yasutaka Suzuki, Seiji Tani, Jun Kawamata

2P040 Two-photon absorption characteristics and cell imaging of novel styryl derivatives

○Hiroki Moritomo, Arina Tomoyuki, Yasutaka Suzuki, Jun Kawamata

2P041 Observation of fluorescence resonance energy transfer between some fluorescent substances in liposomes

○Takeshi Watanabe, Masanori Miura, Kenichi Chiba, Satoshi Ohkubo

2P042 Observation of fluorescence resonance energy transfer between some fluorescent substances in erythrocyte ghosts

○Hiroki Aketo, Masanori Miura, Kenichi Chiba, Satoshi Ohkubo

2P043 Hydrothermal synthesis of phosphorus substituted tobermorite and Eu(III) intercalation

○Minoru Sasaki, Eriko Ohshima

2P044 Determination of polyhexamethylene biguanide hydrochloride using flow injection analysis with spectrophotometric detection

○Takashi Masadome, Shota Oguchi, Teruyuki Kobayashi

2P045 Interconversion between quinone and catechol caused by photo- or redox reactions on ruthenium polypyridyl complexes

○Yuka Soga, Tsugiko Takase, Dai Oyama

2P046 Design and synthesis of ruthenium complexes for an ideal NADH model compound

○Narumi Ukawa, Tsugiko Takase, Dai Oyama

2P047 Regulation of thiocyanate linkage isomerism using elaborately designed ruthenium polypyridyl complexes

○Yuki Watanabe, Takashi Yamanaka, Tsugiko Takase, Dai Oyama

2P048 Stereospecific synthesis of carbonyl complexes containing asymmetrical bidentate ligand

○Ryutaro Naoi, Kazumi Yuzuriya, Tsugiko Takase, Dai Oyama

2P049 Structures and Adsorption Properties of Two-Dimensional Copper(II) Complexes with Methanesulfonate Anions

○Hidenori Ishibashi, Shin-ichiro Noro, Kazuya Kubo, Takayoshi Nakamura

## 【Physical Chemistry】

2P050 Infrared spectroscopy of large protonated and neutral ammonia clusters  $H^+(NH_3)_n$  and  $(NH_3)_n$  ( $n=8-100$ ).

○Marusu Katada, Ryunosuke Shishido, Asuka Fujii

2P051 Infrared spectroscopy of cationic tetrahydrofuran and its dimer to explore the acidities of CH bonds

○Min Xie, Yoshiyuki Matsuda, Asuka Fujii

2P052 Infrared spectroscopy and theoretical study on Fermi resonance of the excess proton vibration in binary clusters

○Ryunosuke Shishido, Kuo Jer-Lai, Asuka Fujii

2P053 Structures of iron oxide cluster ions studied by ion mobility spectrometry

- Tatsuya Komukai, Keiji Ohshimo, Fuminori Misaizu  
2P054 Multiconfigurational simulation for strong field ionization: Analysis of high harmonic emissions from molecular orbitals
- Shu Ohmura, Takayuki Oyamada, Tsuyoshi Kato, Hirohiko Kono, Shiro Koseki  
2P055 Infrared Spectra of the Molecular Complexes of Methylthionitrite with Hydrogen Halides in Low-Temperature Matrices
- Masayuki Hara, Hitoshi Yashiro, Eiichi Suzuki  
2P056 Photodissociation of  $\text{Mg}^+\text{ICH}_3$  complex ions observed by using a reflectron mass spectrometer with an imaging detector
- Kenichiro Yamazaki, Kenichi Okutsu, Keiji Ohshimo, Fuminori Misaizu  
2P057 Isomer Separation of Sodium Fluoride Nanocrystal Ions
- Toru Takahashi, Kanako Konno, Keiji Ohshimo, Naoki Kishimoto, Fuminori Misaizu  
2P058 Discharge current dependence of ion intensity generated by pulse magnetron sputtering method
- Yoshinori Nakamura, Isamu Mizuuchi, Tetsuro Tamura, Kiichirou Koyasu, Masahide Tona, Keizo Tsukamoto, Keiji Ohshimo, Fuminori Misaizu  
2P059 Ultrafast electron and lattice dynamics in gold island films probed by transient absorption spectroscopy and laser-plasma based X-ray diffraction
- Hikaru Sotome, Yosuke Azuma, Sho Asami, Shinji Kajimoto, Hiroshi Fukumura  
2P060 Isotope-selective molecular alignment induced by optimally designed laser pulse
- Kaoru Nakashima, Yuki Yoshi Ohtsuki, Hirohiko Kono  
2P061 Numerical synthesis of microwave pulses for controlling KCs molecular qubits trapped in an optical lattice
- Kenta Arai, Yuki Yoshi Ohtsuki, Hirohiko Kono  
2P062 Optimal control of molecular orientation by combining a femtosecond laser pulse with a THz pulse
- Masataka Yoshida, Kaoru Nakashima, Yuki Yoshi Ohtsuki, Hirohiko Kono  
2P063 Phase Transition Behavior and Dielectric Properties of  $(\text{Na}^+)(m\text{-Methoxybenzoate})$
- Manami Endo, Kiyonori Takahashi, Norihisa Hoshino, Takashi Takeda, Tomoyuki Akutagawa  
2P064 The Effect of Ion Pair Formation on Ion Passage through the Liquid-Liquid Interface
- Nobuaki Kikkawa, Akihiro Morita  
2P065 Vibronic effects on electronic excitations in  $\text{CO}_2$  induced by electron impact
- Noboru Watanabe, Tsukasa Hirayama, Daisuke Suzuki, Masahiko Takahashi  
2P066 Exciton Resonance between Inorganic and Organic Layers in Perovskite Compounds
- Katsuhiko Nagao, Naoki Kawano, Masanori Koshimizu, Keisuke Asai  
2P067 Surface Oxidation Dynamics on Ni(001) and Ni(111) as Observed by Synchrotron

## Photoemission Spectroscopy

- Yuden Teraoka, Yutaro Iwai, Keisuke Inoue, Akitaka Yoshigoe, Ryuta Okada  
2P068 Symmetry Assignment to Low-Lying Electronic Excited State of Jet-Cooled Molecules by Polarized Two-Photon-Excitation Spectroscopy: Indan, Isoindolene, Tolane, and *p*-Cyanophenylpyrrole
- Daiki Ogata, Yuuichi Satou, Motoki Isizeki, Katsuhiko Okuyama  
2P069 Spectroscopic Observation of Tautomerism of 2-Amino-1,3-diazaazulene and 2-Mercapto-1,3-diazaazulene
- Takatoshi Sato, Shouhei Akiba, Katsuhiko Okuyama  
2P070 Application of the Gaussian-based multiconfiguration wavepacket method to proton transfer dynamics
- Yuta Arai, Tatsuto Yamazaki, Manabu Kanno, Hirohiko Kono  
2P071 Exciton Reaction in Rubrene Crystals: Fission and Electron Transfer
- Tomonori Takahashi, Akihiro Okazaki, Noriyuki Sato, Hiroyuki Kazama, Saori Okuyama, Yusuke Ishii, Ryuzi Katoh  
2P072 Mechanism of UV-photocatalytic Reaction of Electrolyte Solution for Dye-sensitized Solar Cells
- Shohei Nakajima, Ryuzi Katoh

## 【Organic Chemistry】

- 2P074 Synthetic studies of lycopodine and stenine using intramolecular Mannich reaction
  - Takanao Satoh, Hirofumi Ueda, Hidetoshi Tokuyama
- 2P075 Synthetic studies on (-)-isoschizogamine
  - Akihiro Takada, Hiroaki Fujiwara, Kenji Sugimoto, Hirofumi Ueda, Hidetoshi Tokuyama
- 2P076 Aerobic oxidation of amines with Grubbs catalysts
  - Kei Yoshida, Yoshiyuki Komatsu, Daichi Kawauchi, Hirofumi Ueda, Hidetoshi Tokuyama
- 2P077 Synthetic studies on rostratin B
  - Shun Okaya, Taichi Kurogi, Hideto Fujiwara, Kentaro Okano, Hidetoshi Tokuyama
- 2P078 Synthetic studies on pyranoindoles having inhibitory activity for HCV NS5B polymerase
  - Takahiro Noro, Kentaro Okano, Hidetoshi Tokuyama
- 2P079 Synthesis of multi-substituted pyrrole utilizing Au-catalyzed cascade reaction
  - Minami Yamaguchi, ○Hiroshi Kameya, Kenji Sugimoto, Hirofumi Ueda, Hidetoshi Tokuyama
- 2P080 Synthetic studies on pestaloquinols A and B
  - Takafumi Hirokawa, Masayuki Kageyama, Shigefumi Kuwahara
- 2P081 Synthetic studies on Sg17-1-4
  - Tomomi Suzuki, Tomohiro Nagasawa, Masaru Enomoto, Shigefumi Kuwahara

2P082 Synthetic Studies of Maoecrystal V

○Masaaki Kotake, Hiroki Asao, Ayaka Sasaki, Yasuharu Shimasaki, Teiko Yamada, Shigefumi Kuwahara, Hiromasa Kiyota

2P083 Synthetic studies of clionamines, autophagy-modulating amino steroids isolated from *Cliona celata*

○Akiyuki Yoshida, Yuuki Sato, Konosuke Hiramatsu, Teiko Yamada, Shigehumi Kuwahara, Hiromasa Kiyota

2P084 Synthetic studies of enacyloxins (1): C9'-C23' fragment

○Wataru Igarashi, Hiroyuki Furukawa, Hiroaki Hoshikawa, Aki Saito, Manabu Yaosaka, Teiko Yamada, Shigefumi Kuwahara, Hiromasa Kiyota

2P085 Synthetic studies of enacyloxins (2): C1-C6 and C1'-C15' fragments

○Aki Saito, Wataru Igarashi, Osamu Nakayama, Hiroyuki Furukawa, Hiroaki Hoshikawa, Teiko Yamada, Shigefumi Kuwahara, Hiromasa Kiyota

2P086 Synthesis and biological evaluation of neopeltolide analogues

○Takuma Noguchi, Masato Kawakami, Haruhiko Fuwa, Makoto Sasaki

2P087 Synthesis and biological evaluation of structural analogues of gambierol

○Kazuaki Hirota, Yuto Suga, Haruhiko Fuwa, Makoto Sasaki

2P088 Synthetic studies of 30-*epi*-DEFG ring model of gambieric acids

○Mizuho Sato, Haruhiko Fuwa, Makoto Sasaki

2P089 An efficient synthesis of medium-sized cyclic ethers via functionalization of mixed thioacetals

○Yuto Suga, Haruhiko Fuwa, Makoto Sasaki

2P090 Synthetic studies on the A/BCD-ring fragment of gambieric acid A

○Ryo Fukazawa, Haruhiko Fuwa, Makoto Sasaki

2P091 Synthetic studies on pestheic acid

○Yoshiaki Takahashi, Masaki Koshimizu, Haruka Ishimi, Takahiro Suzuki, Susumu Kobayashi

2P092 Enantioselective total synthesis of halichlorine

○Daisuke Unabara, Shu Xu, Daisuke Uemura, Hirokazu Arimoto

2P093 Total Synthesis of Kendomycin

○Shu Xu, Tetsuya Sengoku, Yoshinori Emori, Kenji Ogura, Kenji Kitada, Daisuke Uemura, Hirokazu Arimoto

2P094 Synthetic studies on polycavernosides A and B

○Yuki Kawashima, Shohei Sasaki, Haruhiko Fuwa, Makoto Sasaki

2P095 Synthetic studies on didemnaketal B

○Takashi Muto, Kumiko Sekine, Haruhiko Fuwa, Makoto Sasaki

2P096 Studies on stereoselective synthesis of the C19-C28 domain of iriomoteolide-2a

- Akihiro Hakamata, Haruhiko Fuwa, Makoto Sasaki  
2P097 A Selective DIBAL Reduction of  $\alpha$ ,  $\beta$ -Unsaturated Esters to Aldehydes in Flow  
Masahito Yoshida, ○Hiroyuki Otaka, Takayuki Doi
- 2P098 Asymmetric Intramolecular Allylation of Aldehydes with Allylpalladium Intermediates  
Hirokazu Tsukamoto, ○Ayumu Kawase, Takayuki Doi
- 2P099 Solid-Phase Synthesis of Spiruchostatin A and its Derivatives Using a Silyl Linker  
Masahito Yoshida, ○Ken-ichi Sasahara, Takayuki Doi
- 2P100 Efficient Synthesis of 3-Acylflavone Derivatives via Lewis Base-Catalyzed Intramolecular Tandem Acyl Transfer-Cyclization  
Masahito Yoshida, ○Koya Saito, Yuta Fujino, Takayuki Doi
- 2P101 A Direct and Mild Formylation Method for Substituted Benzenes Utilizing Dichloromethyl Methyl Ether-Silver Trifluoromethanesulfonate  
○Kosuke Ohsawa, Masahito Yoshida, Takayuki Doi
- 2P102 Synthesis and Biological Evaluation of Destruxin E Derivatives as Potent Negative Regulators of Osteoclast Morphology  
○Hiroshi Sato, Yoshitaka Ishida, Masahito Yoshida, Hayato Murase, Hiroshi Nakagawa, Takayuki Doi
- 2P103 Total synthesis of saponarin, *C,O*-diglycosylflavone  
Kazufumi Misawa, ○Miharu Chida, Shingo Sato
- 2P104 Chemical conversion of a safflower red pigment for the improvement of the heat- and light-resistances  
Tatuya Uehara, Nor Aini Bunti Shafuddin, ○Yuto Nagaoka, Shingo Sato
- 2P105 Triazole-linked Analogue of Cyclic Diguanylate Monophosphate: Design and Synthesis  
○Koudai Okada, Tomoko Fujino, Hiroyuki Isobe
- 2P106 Synthesis of carbazole dimer by using disilanyl double-pillaring strategy  
○Sho Kamata, Waka Nakanishi, Hiroyuki Isobe
- 2P107 Bottom-up Synthesis of Finite-Zigzag Single-Wall Carbon Nanotubes  
○Takashi Yamasaki, Syunpei Hitosugi, Hiroyuki Isobe
- 2P108 Equatorenes: Synthesis of Distorted Chiral Aromatic Hydrocarbons Possessing 1,8-Di(1-adamantyl)naphthalene Skeleton  
Koji Yamamoto, Naohiro Oyamada, Sheng Xia, ○Yuta Kobayashi, Masahiko Yamaguchi
- 2P109 Synthesis and identification of putative biosynthetic intermediates in early stage for paralytic shellfish toxins  
○Shigeaki Tsuchiya, Yuko Cho, Keiichi Konoki, Kazuo Nagasawa, Yasukatsu Oshima, Mari Yotsu-Yamashita
- 2P110 5-Fluoro-2'-deoxyuridine influenced the growth and the biosynthesis of intermediates for

paralytic shellfish toxins of the dinoflagellate, *Alexandrium tamarense*

○Yuko Cho, Shigeki Tsuchiya, Keiichi Konoki, Yasukatsu Oshima, Mari Yotsu-Yamashita

2P111 Interaction of taxol with tubulins from *Taxus cuspidata*

○Yuma Kudo, Yuko Cho, Mari Yotsu-Yamashita, Keiichi Konoki

2P112 *In vitro* acylation of okadaic acid in the presence of various bivalves' extracts

Keiichi Konoki, Tatsuya Onoda, Ryuichi Watanabe, ○Sachie Furumochi, Yuko Cho, Shinnosuke Kaga, Toshiyuki Suzuki, Mari Yotsu-Yamashita

2P113 The structure of the novel tetrodotoxin analog, 6-deoxytetrodotoxin, and structure activity relationship study on C-6 and C-11 hydroxyl groups of tetrodotoxin

○Yuta Kudo, Keiichi Konoki, Yuko Cho, Mari Yotsu-Yamashita

2P114 Identification of 5,11-dideoxytetrodotoxin in marine animals, and characterization of ESI-MS fragment ions of tetrodotoxin and its analogs

○Mari Yotsu-Yamashita, Yuka Abe, Yuta Kudo, Keiichi Konoki, Yuko Cho, Toshio Nishikawa, Minoru Isobe

2P115 Discovery of Structurally Diverse Novel Secondary Metabolites from Entomopathogenic Fungi by Using Chemical Epigenetic Method

○Takashi Yamamoto, Teigo Asai, Yoshiteru Oshima

2P116 Manipulation of Fungal Epigenetics Using a HDAC Inhibitor Induced Structurally Diverse Polyketide Productions in *Chaetomium indicum*

○Teigo Asai, Takashi Yamamoto, Naoki Shirata, Tohru Taniguchi, Kenji Monde, Yoshiteru Oshima

2P117 Reductive Glycosylation by Using 4-Benzylloxy-6-methoxy-triazine Donor

○Takayuki Suzuki, Yuka Takagi, Masato Noguti, Shin-ichiro Shoda

2P118 Chemo-enzymatic synthesis of glycopolymers having  $\alpha$ -N-acetylglucosaminide unit

○Kazunari Serizawa, Ayaka Ohno, Atsushi Kobayashi, Shin-ichiro Shoda

2P119 Synthetic Studies on Spiromamakone A

○Kouichi Kumasaka, Hirokazu Tsukamoto, Takayuki Doi

2P120 Synthetic study on haouamine derivatives using 'anti-Wacker'-type cyclization

Hirokazu Tsukamoto, ○Saki Nakamura, Takayuki Doi

2P121 Synthetic Study for Cyclodepsipeptide Piperidamycins

○Naoki Sekioka, Masahito Yoshida, Miho Izumikawa, Motoki Takagi, Kazuo Shin-ya, Takayuki Doi

2P122 Synthesis of Photoaffinity Probe of Beauveriolides for Binding-site Analysis.

Yuichi Masuda, ○Kazumasa Aoyama, Masahito Yoshida, Keisuke Kobayashi, Nobuhiro Koyama, Hiroshi Tomoda, Takayuki Doi

2P236 Facile Synthesis of Glycosyl Fluoride

○Hikari Nakano, Yoshihiro Kurodzu, Masato Noguchi, Shin-ichiro Shoda

# 【Supercritical Fluid Technology】

2P123 Isomerization of Glucose with Solid Catalysts in Ionic Liquid-water Mixtures

○Shiho Matsuda, Haruyuki Kitajima, Masaru Watanabe, Taku Aida, Richard Smith

2P124 Production of Organic Acids from Alginate by Hydrothermal Oxidation

○Taku Michael Aida, Kenji Oshima, Ryoma Maruta, Yasuaki Kumagai, Masaru Watanabe, Richard Lee Smith Jr.

2P125 Extraction and Liquefaction of Microalgae with Hot and High temperature water

○Toshiyuki Nonaka, Ryoma Maruta, Masayuki Iguchi, Taku Michael Aida, Masaki Ota, Richard Lee Smith Jr.

2P126 Preparation of PNIPAM/silica membrane and its separation characteristics

○Ruriko Kimura, Yasuto Sato, Hideki Watanabe, Kenji Murakami

2P127 Catalytic reforming of bio-oil using ion exchanged zeolite

○Takahiro Oga, Nhu Y Khau Thi, Sena Takahashi, Kenji Murakami

2P128 Effects of iron-based catalysts in steam gasification of low rank coal

○Lingbo Shen, Kenji Murakami

2P129 Characterization of carbon nanotube thin-film transistors fabricated with material selectivity of peptide aptamers

○Yuichiro Shimada, Mitsuo Umetsu, Akane Hosokawa, Atsushi Shono, Daisuke Kobayashi, Masakazu Sugiyama, Hiroyuki Fujita, Katsuto Otake

2P130 Local composition of water-methanol mixtures by molecular dynamics simulation from ambient conditions to high temperature and pressure region.

○Kyohei Horikawa, Yuki Maeda, Takumi Ono, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

2P131 Vapor-liquid equilibrium measurements for modeling of supercritical fluid rectification of natural components

○Yuya Maeta, Masaki Ota, Yoshiyuki Sato, Jiro Takito, Yasushi Ohizumi, Hiroshi Inomata

2P132 Fundamental study on incubation and condensation of culture medium for supercritical extraction of microalgae

○Yuri Hamabe, Masayuki Iguchi, Toshiyuki Nonaka, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

2P133 Measurements of density and viscosity of alcohol+water mixtures at high temperature and pressure

○Ayako Igarashi, Ryosuke Amezawa, Kyohei Horikawa, Takumi Ono, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

2P134 Extraction and analysis of lipid in *Botryococcus braunii*

○Fujimaru Hishinuma, Toshiyuki Nonaka, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

2P135 Development of a novel method for the solubilization of poorly water - soluble drugs

○Atsushi Hoyano, Rui Murayama, Masanori Kobayashi, Daisuke Kobayashi, Yuichiro Shimada, Atsushi Shono, Katsuto Otake

2P136 Functionalization of Electroconductive and Thermosensitive Hydrogel.

○Kouki Hiranaka, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P137 Glass Transition Temperatures of CO<sub>2</sub>+Pharmaceutical excipient Systems

○Kenta Tanaka, Masanori Kobayashi, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P138 Effects of the Solid co-Solvent on the Melting Point Depression of Organic Substances

○Yuki Nakamura, Masanori Kobayashi, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P139 Formation of Conductive Polymer Nanoparticles with a Confined Space Approach

○Hiroaki Maeda, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P140 Oxidative Stability of Zero-Valent Copper Nanoparticles Synthesized with a Continuous Supercritical Hydrothermal Method

○Takuya Morioka, Shigeki Kubota, Masafumi Takesue, Hiromichi Hayashi, Richard Lee Smith Jr.

2P141 Sol-gel induced selective hydrolysis of alginic acid in high temperature water

○Yasuaki Kumagai, Taku Michael Aida, Ryoma Maruta, Kenji Oshima, Masaru Watanabe, Richard Lee Smith Jr.

2P142 Synthesis and properties of piezoelectric material  $K_xNa_{(1-x)}NbO_3$  with a supercritical water flow apparatus

Suguru Toyama, ○Keisuke Okada, Hiromichi Hayashi, Masaru Watanabe, Richard Lee Smith Jr.

2P143 Determination of solubilized components from reaction of cellulosic-biomass in high temperature water

○Yukihiro Kanaguri, Rui Takeuchi, Taku Michael Aida, Masaru Watanabe, Hiroshi Inomata, Richard Lee Smith Jr.

2P144 Effect of reaction temperature on hydrothermal solubilization of cellulosic biomass in high temperature water

○Rui Takeuchi, Masaru Watanabe, Haruyuki Kitajima, Shiho Matsuda, Taku Michael Aida, Richard Lee Smith, Jr.

2P145 Application of PC-SAFT equation of state to modeling of high temperature and pressure phase equilibria with water and hydrocarbon association

○Masaki Togo, Yusuke Shimoyama

2P146 Development of cathode for Air-battery with functional ionic liquid gel binder using supercritical carbon dioxide drying

○Taiki Sugamura, Hironobu Morizaki, Yusuke Shimoyama

2P147 Development of drug-loaded contact lenses using supercritical solvent impregnation method

with carbon dioxide and water

○Yuta Yokozaki, Junichi Sakabe, Yusuke Shimoyama

2P148 Versatility of nanoparticle design technique of drugs using the rapid expansion of supercritical solutions (RESS) technique

○Daichi Shinotsuka, Kohei Demoto, Daisuke Kondo, Masamichi Nishijima, Junichi Sakabe, Yusuke Shimoyama, Hirohisa Uchida

2P149 Modeling of drug solubility in supercritical carbon dioxide using equation of state based on hole theory and conductor-like screening model

○Junichi Sakabe, Yusuke Shimoyama, Hirohisa Uchida

2P150 Formation of vespula-like structure by the foaming of PMMA/ CO<sub>2</sub>/ Tetramethoxysilane Ternary System

○Yuhei Yamaji, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake, Satoshi Yoda, Takeshi Furuya, Yoshihiro Takebayashi

2P151 Phase Behavior of PS/Tetramethyl orthosilicate/CO<sub>2</sub> Ternary System

○Hiroaki Matsukawa, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake, Satoshi Yoda, Takeshi Fruya, Yoshihiro Takebayashi, Yasuo Okawa

2P152 Tuning Curvature of Molecular Aggregate by Mixing of Fluorocarbon Surfactants in Supercritical CO<sub>2</sub>

○Shinji Ono, Atsushi Yoshizawa, Masanobu Sagisaka

2P153 Characterization of liposome prepared by non- solvent supercritical reverse phase evaporation method

○Syougo Taguchi, Keishi Suga, Hiroshi Umakoshi, Keita Hayashi, Hidemi Nakamura

2P154 Recycling of Zinc Phosphate Sludge

○Ryo Sugawara, Hitoshi Yashiro, Eiti Suzuki, Syochiku Kure

2P155 Foaming behavior of polymers with using mixtures of CO<sub>2</sub> and N<sub>2</sub> as foaming agent

○Tomohiro Kato, Daisuke Kobayashi, Yuichiro Shimada, Atsushi Shono, Katsuto Otake

2P156 Preparation of Conductive Polymer Microfibers with a Double Nozzle Electrospray Method

○Takashi Uruma, Takuya Endo, Yuichirou Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P157 High pressure electroplating using supercritical carbon dioxide

○Shogo Kambe, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P158 Solubility measurements of carbon dioxide in drugs by the quartz crystal microbalance technique

○Yusuke Ishikida, Masanori Kobayashi, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P159 Preparation of solid dispersions of poorly water-soluble drugs using the melting point

depression by high-pressure carbon dioxide

○Yuya Yamaguchi, Masanori Kobayashi, Yuichiro Shimada, Daisuke Kobayashi, Atsushi Shono, Katsuto Otake

2P160 Preparation and properties of o/w emulsion of high viscosity phosphonium ionic liquids

○Yasuki Shindo, Takeshi Higuchi, Tadahiro Aita

2P161 Preparation of monomeric materials from tea residues

Masami Watanabe, ○Yu Kimura, Kenji Okubo, Hideyuki Tagaya

2P162 Adhesion interlayer properties between rubber compound and brass

○Kazuki Endo, Hidetoshi Hirahara, Sumio Aisawa, Jing sang, Junichi Kodama

2P163 Preparation of USY zeolite-mesoporous silica core-shell composites under acidic conditions

○Ryo Kandori, Takao Ikeuchi, Shigeaki Kitabayashi, Yukihiro Inoue, Takayoshi Shindo

## 【Polymer Science and Technology】

2P164 Corrosion protection property of water dispersible polyaniline

○Hideaki Ibuki, Noriyuki Kuramoto

2P165 The ring-opening polymerizability of 5-membered cyclic carbonates derived from aldohexopyranosides

○Kunio Tezuka, Kuniomi Koda, Osamu Haba

2P166 Synthesis and properties of poly(tetramethylsilarylenesiloxane) derivatives with benzodithiophene moiety

○Hitoshi Hanamura, Nobukatsu Nemoto

2P167 Adsorption of p-Alkylphenol by the use of Membranes including Host Molecules

○Yudai Kudo, Hiroki Takahata, Yasuaki Kikuchi, Takaomi Kobayashi

2P168 Synthesis of Polydiacetylenes with 1-Pyrenyl Groups and Their Optical and Electric Properties

○Shoya Ito, Yoko Tatewaki, Shuji Okada

2P169 Synthesis and Solid-State Polymerization of Conjugated Compounds with Two Oligoene Structures

○Keita Sasamura, Yoko Tatewaki, Syuji Okada

2P170 Synthesis and adhesion properties of triazine-containing aromatic polyimides

○Yu Saito, Shigeo Sasaki, Yuji Shibasaki, Yoshiyuki Oishi

2P171 Synthesis and properties of aliphatic-aromatic polyimides with ester groups

○Kouki Morino, Yuji Shibasaki, Yoshiyuki Oishi

2P172 Synthesis of aromatic polyester from triazine-based active diester

○Nobufumi Sato, Yurika Araya, Yuji Shibasaki, Yoshiyuki Oishi

2P173 Synthesis and Properties Poly(L-lactide)-Poly( $\epsilon$ -caprolactone) Multiblock Copolymers by

## Thiourea-Based Organocatalyst

○Yuta Yamadoi, Kazuya Matsumoto, Mitsutoshi Jikei

2P174 Synthesis of Amine-Terminated Aromatic Polyamide Dendrimers with Polyhedral Oligomeric Silsesquioxane Cores

○Kunio Nishi, Kazuya Matsumoto, Mitsutoshi Jikei

2P175 Synthesis of aromatic polyketones based on 2,7-fluorenediyl units in the main chains through nucleophilic aromatic substitution polymerization

○Hironobu Kagami, Shinnosuke Ito, Katsuya Maeyama

2P176 Fluorescent behavior of polyketones and poly(arylene vinylene ketone)s

○Tadashi Tsukamoto, Katsuya Maeyama

2P177 Synthesis of aromatic polyketones bearing alicyclic units through  $P_2O_5$ -MsOH mediated polycondensation

Ayumu Katada, ○Yasuaki Saito, Katsuya Maeyama

2P178 Preparation of Siloxane Based Hybrid Network Polymers

○Ali Demirci, Shunsuke Yamamoto, Jun Matsui, Masaya Mitsuishi, Tokuji Miyashita

2P179 Synthesis of multiblock copolymer based on polysiloxane with sulfobetaine substituents

○Ryo Kato, Yoshihiko Kihara, Akihiko Saito, Takuya Yuzawa, Mitsuru Haruki, Nobukatsu Nemoto

2P180 Synthesis and properties of quaternized imidazolium salts with oxyethylene chains based on polysiloxane

○Tsukasa Ichikawa, Yuya Ishii, Ayaka Kodama, Kenta Sakuma, Nobukatsu Nemoto

2P181 Synthesis and Properties of Novel Cyclic Structure-Containing Poly(arylene ether)s

○Kazuya Matsumoto, Yasuhiro Kimata, Mitsutoshi Jikei

2P182 Effects of Solvents on the Radical Polymerization of Vinyl Monomer Initiated with Tributylborane

○Shuichi Kanno

2P183 Radical Polymerization of Vinyl Monomers Using Borane-Ammonia Complex as an Initiator under Various Reaction Conditions

○Shuichi Kanno

2P184 Effects of Additives on the Radical Polymerization Initiated with Tri-*sec*-butylborane

○Shuichi Kanno

2P185 Radical Polymerization of Vinyl Monomer Initiated with *S*-Alpine-borane at Low Reaction Temperature

○Shuichi Kanno

2P186 Synthesis of crosslinked aromatic polyketones containing alicyclic units.

○Takuya Shibata, Katsuya Maeyama

2P187 Synthesis and properties of triazine-based hyperbranched polyimide-silica hybrid (II)

○Yuki Toyama, Yuji Shibasaki, Yoshiyuki Oishi

2P188 Synthesis and orientation control of polymer-grafted inorganic nanorods

○Shoichi Kubo, Rei Taguchi, Kenichi Hayashida, Mamiko Narita, Shingo Hadano, Osamu Watanabe, Tomokazu Iyoda, Masaru Nakagawa

## 【Materials Chemistry】

2P189 Synthesis of a novel sodium scandium silicate  $\text{Na}_3\text{ScSi}_3\text{O}_9$  and its luminescence properties activated with  $\text{Eu}^{2+}$

○Jihong Min, Hideki Kato, Makoto Kobayashi, Hisanori Yamane, Masato Kakihana

2P190 Synthesis of a green-emitting phosphate phosphor  $\text{KSrY}(\text{PO}_4)_2:\text{Eu}^{2+}$

○Akiko Saito, Hideki Kato, Makoto Kobayashi, Yasushi Sato, Masato Kakihana

2P191 Synthesis of an iron-picolinato compound as a precursor for iron oxides

○Junki Sato, Makoto Kobayashi, Hideki Kato, Eunsang Kwon, Masato Kakihana

2P192 Fabrication of Podophyllotoxin Dimer Nanoparticles and Their Anticancer Properties

○Yoshitaka Koseki, Yoshikazu Ikuta, Tatsuya Murakami, Minoru Ueda, Tsunenobu Onodera, Hidetoshi Oikawa, Hitoshi Kasai

2P193 Intercalation behavior of porphyrin compounds into Mg-Al layered double hydroxide and its physicochemical property

○Tomoko Abe, Sumio Aisawa, Satoshi Takahashi, Hidetoshi Hirahara, Eiichi Narita, Miyuki Tanaka, Tsugio Sato

2P194 Synthesis and characterization of rare earth doped layered double hydroxides by mechanochemical method

○Satsuki Shinohara, Sumio Aisawa, Hidetoshi Hirahara, Eiichi Narita, Tsugio Sato

2P195 Synthesis and Piezoelectric Properties of  $(\text{K},\text{Na})\text{NbO}_3$  by Solvothermal Method

○Yohei Adachi, Qiang Dong, Shu Yin, Tsugio Sato

2P196 Microwave-assisted solvothermal synthesis and up-conversion luminescence properties of  $\text{YPO}_4:\text{Yb}^{3+}/\text{Er}^{3+}$  nanocrystals

○Kentaro Abe, Qiang Dong, Shu Yin, Tsugio Sato

2P197 Microwave-assisted hydrothermal synthesis and photocatalytic activity of  $\text{SrTiO}_3$ -based photocatalyst

○Ryusuke Akita, Qiang Dong, Shu Yin, Tsugio Sato

2P198 Synthesis and Dielectric Properties of  $(1-x)(\text{Na}_{0.5}\text{Bi}_{0.5})\text{TiO}_3-x\text{Ba}(\text{Mg}_{0.5}\text{W}_{0.5})\text{O}_3$  by a Solvothermal Approach

○Takeshi Kimura, Qiang Dong, Shu Yin, Takatoshi Hashimoto, Atsushi Sasaki, Shuji Aisawa, Tsugio Sato

2P199 Observation of intracellular dynamic state of layered double hydroxide nanocomposite

○Miyuki Tanaka, Sumio Aisawa, Hidetoshi Hirahara, Eiichi Narita, Qiang Dong, Shu Yin, Tsugio Sato

2P200 Synthesis and characterization of NaB<sub>5</sub>C ceramics

○Takuma Kimura, Haruhiko Morito, Hisanori Yamane

2P201 Preparation and crystal structures of Li<sub>3</sub>BP<sub>2</sub>O<sub>8</sub> and Li<sub>2</sub>B<sub>3</sub>PO<sub>8</sub>

○Toru Hasegawa, Hisanori Yamane

2P202 Synthesis, crystal structures and photoluminescence properties of BaMg<sub>6</sub>(Sn<sub>1-x</sub>Ti<sub>x</sub>)<sub>6</sub>O<sub>19</sub> (x= 0.0 – 1.0) solid solutions

○Naoki Takani, Hisanori Yamane

2P203 Improvement of Photocatalytic Activity of CaTiO<sub>3</sub> Fine Particles by Metal-Doping

○Takeshi Kimijima, Kiyoshi Kanie, Masafumi Nakaya, Atsushi Muramatsu

2P204 Preparation of Fe<sub>3</sub>O<sub>4</sub>-coated α-Fe Nanoparticles and their Oxidation Resistivity

○Ryo Nishida, Masafumi Nakaya, Atsushi Muramatsu

2P205 Hydrogen Adsorption on Zeolite-Templated Carbon Doped with Alkali Metal

○Fumihide Ohtake, Hirotomo Nishihara, Hiroyuki Itoi, Takashi Kyotani

2P206 Fabrication of Metallic Glass Nanoparticles and Their Application to Methanol Electro-oxidation as Highly Durable Catalysts

○Ming Zhao, Katsuhiro Abe, Shin-ichi Yamaura, Naoki Asao

2P207 Preparation and characterization of layered nano composites by self-assembly reaction of amino acid and metal hydroxide

○Hajime Fukuda, Kazuya Sisito, Hideyuki Tagaya

2P208 Synthesis, Characterization, and Organic Solar Cell Application of Electron-Transporting Materials Based on Naphthalene Bismide Unit

○Mohamad Khairi Ab Aziz, Kazuhiro Nakabayashi, Hideharu Mori

2P209 Hydrothermal Synthesis of BaZrO<sub>3</sub> Fine Particles Controlled in Size and Shape: Effect of the Shape on the Fluorescence Behavior by Europium Doping

○Yuki Seino, Kiyoshi Kanie, Masafumi Nakaya, Atsushi Muramatsu

2P210 Photo-responsive Vesicles: Reversible Formation-Dissolution Behavior of Phospholipids with an Azo-Moiety

○Natsuki Sasade, Kiyoshi Kanie, Masaki Matsubara, Atsushi Muramatsu

2P211 Dendron Modification of Monodispersed Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> Core/Shell Nanosphere

○Mitsuki Hinode, Kiyoshi Kanie, Masaki Matsubara, Ryo Nishida, Masafumi Nakaya, Atsushi Muramatsu

2P212 Liquid-Crystalline Organic-Inorganic Hybrid Dendrimer: Photoluminescence Behavior of Self-Organized CdS Quantum Dots

○Masaki Matsubara, Kiyoshi Kanie, Jun Yabuki, Masafumi Nakaya, Goran Ungar, Atsushi

Muramatsu

2P213 Synthesis and characterization of novel sodium magnesium stannides

○Takahiro Yamada, Ryo Ishiyama, Hisanori Yamane

2P214 Resonance shear measurement on confined alkylphenylether lubricants

○Masashi Mizukami, Junichi Watanabe, Kazue Kurihara

2P215 Synthesis of Homogeneous Micro-sized Plate-like CeO<sub>2</sub> Particles and Their Novel Applications

○Shu Yin, Qiang Dong, Tsugio Sato

2P216 Material design for red emission based on rare-earth-free phosphors with alkali vanadium oxyfluorides

○Yuta Matsushima, Minoru Shida, Akane Sato

2P217 Assembling covalent porous organic material via functional control of tetraphenylmethane skeleton

○ChiLin Hsieh, Shinya Takaishi, Hiroaki Iguchi, Brian K Breedlove, Masahiro Yamashita

2P218 Synthesis, Structure and Optical Properties of DPh-BTBT/P2V2TT Co-crystal System

○Shuai Mu, Shinya Takaishi, Brian Breedlove, Masahiro Yamashita

2P219 Structures, synthesis of highly pi-conjugated metal-organic frameworks

○Bin Wu, Shinya Takaishi, Brian Breedlove, Masahiro Yamashita

2P220 Effect of structural properties of titania pillared mica on adsorption and photodegradation of toluene.

○Shigeaki Kitabayashi, Yuta Kosuga, Takao Ikeuchi, Yukihiko Inoue, Takayoshi Shindo

2P221 Crystallization of zinc-containing amorphous calcium phosphate

○Tomohiro Uchino, Kento Takizawa, Koji Taguchi

## 【Electrochemistry】

2P222 Cell culture using alginate hydrogel by electrodeposition

○Fumisato Ozawa, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P223 Single Cell Evaluation of Differentiation Status of the Embryonic Stem cell by Using Scanning Electrochemical Microscopy

○Yoshiharu Matsumae, Toshiharu Arai, Yasufumi Takahashi, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P224 Real-time Monitoring of Living Tissue Activity Using LSI-based Amperometric Biosensing Device with 400 Electrodes

○Kosuke Takara, Mustafa Şen, Kumi Y. Inoue, Yuka Hashi, Ryota Kunikata, Atsushi Suda, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P225 Novel electrochemical methods for highly sensitive detection of endotoxin.

○Shinichiro Takano, Kumi Y. Inoue, Satoko Takahashi, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P226 Electrochemical detection of apoptosis based on caspase-3 activity assay

○Shusaku Shiomoto, Shinichiro Takano, Kumi Y. Inoue, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P227 Three dimensional spatial assembly of stem cells by using dielectrophoresis in GelMA hydrogel

○Shukuyo Yamada, Javier Ramón-Azcón, Toshiharu Arai, Fumisato Ozawa, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

2P228 Local redox cycling-based electrochemical chip device with densified electrochemical sensors for electrochemical imaging of cells.

○Hirokazu Komaki, Kosuke Ino, Yusuke Kanno, Hitoshi Shiku, Tomokazu Matsue

2P229 Miniature biofuel cells with self-regulating enzyme-nanotube ensemble film

○Yudai Ogawa, Syuhei Yoshino, Takeo Miyake, Takeo Yamada, Kenji Hata, Matsuhiko Nishizawa

2P230 Surface Analysis of Rapid Rechargeable Lithium Manganese Oxide

○Ryota Nishiya, Tomoyuki Ito, Chiaki Honda, Tomohiro Ito, Kazuhiro Tachibana, Tatsuo Nishina

2P231 Effect of impurity ions contained in the electrolyte on the battery reaction

○Kaoruko Fukase, Takumi Kobayashi, Chiaki Honda, Tomohiro Ito, Kazuhiro Tachibana, Tatsuo Nishina

2P232 Simplified measurement method for flash point by the spark of lithium battery electrolyte

○Kei Kato, Tomoyuki Ito, Tomohiro Ito, Kazunori Kuwana, Kazuhiro Tachibana, Tatsuo Nishina

2P233 Redox Properties of Prussian Blue Nanocrystalline Monolayer on an ITO Electrode

○Kenta Ono, Manabu Ishizaki, Katsuhiko Kanaizuka, Masato Kurihara, Masatomi Sakamoto

2P234 The Effect of Water Dispersed Binders on the Alkali Corrosion of Aluminum Current Collector

○Naoki Kato, Shinya Onodera, Chiaki Honda, Tomohiro Ito, Kazuhiro Tachibana, Tatsuo Nishina

2P235 Highly efficient bioelectrocatalytic films using enzyme-Carbon nanotube composite

○Shuhei Yoshino, Yudai Ogawa, Takuya Ohuji, Koichiro Kato, Takahiro Magome, Takeo Miyake, Hirokazu Kaji, Matsuhiko Nishizawa

## 【Chemical Education】

2P237 放射線と化学教育 ～ガンマ線スペクトロメトリーの機器分析実験への応用～

○Tsugiko Takase, Miyuki Sasaki, Katsuhiko Yamaguchi