

Poster Session

Poster Session Schedule on July 14(Sat), 2007

Set up: 8:00-11:30, Removal: 16:30-17:30

Obligation time

Session A: 12:45 - 13:15, Session B: 13:15 - 13:45, Session C: 16:00 - 16:30

The end letters (A, B, C) of the Poster codes mean the Poster Session code.

P001A pH-Sensitive Thin Films Containing Carboxyl-terminated Poly(amido amine) Dendrimer

Shigeru Tomita, Katsuhiko Sato, and Jun-ichi Anzai(*Tohoku University, Japan*)

P002B Preparation of Layer-by-Layer Assemblies Containing Insulin

Shigehiro Takahashi, Kentaro Yoshida, Hiroshi Sato, and Jun-ichi Anzai*(*Tohoku University, Japan*)

P003C pH-Triggered Release of Insulin from Layer-by-Layer Assemblies

Kentaro Yoshida* and Jun-ichi Anzai(*Tohoku University, Japan*)

P004A Preparation of Novel Sulfonated Block Copolyimides for Proton Conductivity Membranes

Kouta Yamazaki, Shoji Nagaoka, and Hiroyoshi Kawakami (*Tokyo Metropolitan University, Japan*)

P005B Gas Transport Properties of a Novel Organic-inorganic Hybrid Membrane by Plasma Based Ion Implantation

D.Muraoka¹, T.Tezuka¹, S.Nagaoka¹, Y.Suzuki², T.Kobayashi², and H.Kawakami¹
(¹*Tokyo Metropolitan University, Japan*; ²*The Institute of Physical and Chemical Research, Japan*)

P006C Tocopherol Targeted-hybrid Molecular Imprinting Applied as Membrane Adsorbents

Che Ku Mohammad Faizal and Takaomi Kobayashi*(*Nagaoka University of Technology, Japan*)

P007A Effect of Supercritical Carbon Dioxide Upon Properties of Molecularly Imprinted Membranes with Selective Uracil Binding

Quanqiu Zhang and Takaomi Kobayashi* (*Nagaoka University of Technology, Japan*)

P008B Novel Membrane Adsorbents Made of Hybrid Molecularly Imprinted Polymer for Indole Derivatives

Kohei Takeda, Kohei Uemura, and Takaomi Kobayashi*(*Nagaoka University of Technology, Japan*)

P009C Molecularly Imprinted Polymer Spheres Having Adsorption Selectivity of Bisphenol Derivatives

Kaori Katagawa, Masaya Kozuka, and Takaomi Kobayashi*(*Nagaoka University of Technology, Japan*)

P010A Preparation and Thermosensitive Properties of PolyNIPAM Sphere Microgels Containing Itaconic Acid Segments

Takashi Onozuka and Takaomi Kobayashi* (*Nagaoka University of Technology, Japan*)

P011B Preparation and Characterization of Environmentally Sensitive Microgel Particles with Fluorescence Probe

Yoshihiko Sato, Y. Xin, and Takaomi Kobayashi* (*Nagaoka University of Technology, Japan*)

P012C Molecular Imprinting Microparticles Having Inosine Recognition in Binding Behavior

Takayuki Kusunoki and Takaomi Kobayashi* (*Nagaoka University of Technology, Japan*)

P013A Synthesis and Gas Permeability of Polyphenylacetylene Membranes Having Amino Groups

Yuki Sato, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)

P014B Air Humidification by Triethylene Glycol Membrane Supported on a Hydrophobic Microporous Membrane

Jinlong Li* and Akira Ito (*Niigata University, Japan*)

P015C Preparation of Hydroxyapatite Composite Gel by Biomineralization and Application to Medical Material

Sachiko Obara, Hiroshi Saito, Takeshi Yamauchi,* and Norio Tsubokawa (*Niigata University, Japan*)

P016A Preparation of Poly(*N*-isopropylacrylamide) Gel Containing Polymer-grafted Carbon Micro-coils and Its Application to Drug Carrier

Shigenori Sato¹, Takeshi Yamauchi^{1,*}, Norio Tsubokawa¹, Kenji Kawabe, Yukio Hishikawa², and Seiji Motojima³ (¹*Niigata University, Japan*; ²*CMC Technology Development Co. Ltd., Japan*; ³*Gifu University, Japan*)

P017B LSPR for Applications to Biosensing Element

Yasutaka Anraku^{1,*} and Hiromi Kitano² (¹*The University of Tokyo, Japan*; ²*University of Toyama, Japan*)

P018C Effect of Zwitterionic Polymers on Wound Healing

Shigeto Fujishita^{1,2}, Chika Inaba¹, Susumu Tada¹, Makoto Gemmei-Ide¹, Hiromi Kitano^{1,*} and Yoshiyuki Saruwatari³ (¹*University of Toyama, Japan*; ²*Teika Pharmaceutical Co., Ltd., Japan*; ³*Osaka Organic Chemical Ind., Ltd., Japan*)

P019A Study on the Bio-compatibility of Polymers with A Carboxybetaine Moiety

Makoto Gemmei-Ide¹, Chika Inaba¹, Susumu Tada¹, Hiromi Kitano^{1,*}, Takayuki Matsunaga², Akira Mochizuki³, Masaru Tanaka⁴, and Yoshiyuki Saruwatari⁵ (¹*University of Toyama, Japan*; ²*Toyama Prefectural Institute for Pharmaceutical Research, Japan*; ³*Tokai University, Japan*; ⁴*Tohoku University, Japan*; ⁵*Osaka Organic Chemical Industry Ltd., Japan*)

P020B Glucose Fuel Cell with an Anode of Polythiophene Derivative Bearing Glucose Oxidase

Takashi Kuwahara, Mizuki Kondo, Rie Yamazaki, and Masato Shimomura* (*Nagaoka University of Technology, Japan*)

- P021C DNA Sensing with a Quartz Crystal Microbalance for Determination of *Esherichia coli***
K. Kon¹, M.Shimomura¹, and K.Kaneko²(¹*Nagaoka University of Technology, Japan;*
²*Niigata Environment Hygiene Central Laboratory Co., Japan*)
- P022A Separation of Serine Proteases Using a Thermoresponsive Polymer Bearing Diphenyl 1-Amino-2-phenylethylphosphonate**
Shin Ono^{1,*}, Shigenori Yoshikawa¹, Atsushi Yamamoto¹, Kazuki Yasue¹, Fumie Manzaki¹, Takeshi Terashima¹, and Hirofumi Kuroda² (¹*University of Toyama, Japan;*
²*Toyama National College of Technology, Japan*)
- P023B Isolation of Microorganisms that Preferentially Degrade Crystal and Amorphous Region of Biodegradable Polymers**
Naoya Kitamura and Satoshi Osawa(*Kanazawa Institute of Technology, Japan*)
- P024C Gelation Behavior and Aggregate Morphology of Cholesterol Derivatives**
Rie Yamazaki,* Mizuki Kondo, Masato Shimomura, and Noritaka Kimura (*Nagaoka University of Technology, Japan*)
- P025A Structure and Shrinking Kinetics of Polymer Hydrogels**
Hiroshi Sasaki, Keita Tamura, Masamitsu Miya, Hiroki Takeshita,* Katsuhiko Takenaka, and Tomoo Shiomi(*Nagaoka University of Technology, Japan*)
- P026B Preparation and Characterization of Interpenetrating Polymer Networks (IPNs) with Good Optical Transparency and Flexibility for Substrates of Flexible Displays**
Myeon-Cheon Choi and Chang-Sik Ha*(*Pusan National University, Korea*)
- P027C Compatibility and Ionic Conductivity of Nitrile Rubber/Ionic Liquid Composites**
Edy Marwanta,¹ Tomonobu Mizumo,² and Hiroyuki Ohno²(¹*Niigata University, Japan;*
²*Tokyo University of Agriculture and Technology, Japan*)
- P028A Reactive Mixing of Epoxidized Natural Rubber with Poly(L-lactide)**
Takayuki Saito, Warunee Klinklai, Niti Sripitakchai, and Seiichi Kawahara* (*Nagaoka University of Technology, Japan*)
- P029B Removal of Proteins from Natural Rubber with Urea and Its Application to Continuous Process**
Yoshimasa Yamamoto, Warunee Klinklai, Takayuki Saito, and Seiichi Kawahara* (*Nagaoka University of Technology, Japan*)
- P030C Molecular Weight of Grafted Polystyrene of PS-g-DPNR Copolymer**
Nanthaporn Pukkate and Seiichi Kawahara*(*Nagaoka University of Technology, Japan*)
- P031A Preparation and Characterization of Poly(styrene-g-natural rubber) Copolymer**
Patjaree Suksawad and Seiichi Kawahara*(*Nagaoka University of Technology, Japan*)
- P032B Hydrogenation of Natural Rubber Having Epoxy Group**
Phan Trung Nghia, Agata Oshio, Yoshimasa Yamamoto, and Seiichi Kawahara* (*Nagaoka University of Technology, Japan*)

- P033C Half Width and Relaxation Time of Latex State NMR Spectroscopy for Polyalkylacrylate**
Jun Minowa, Seiichi Kawahara,* and Yoshimasa Yamamoto(*Nagaoka University of Technology, Japan*)
- P034A Filler Network Characterization by Differential Dynamic Modulus in Reversing Double-Step Large Compression**
Yukitoshi Yamaguchi, Kohji Suda, Shuji Fujii, and Yoshinobu Isono*(*Nagaoka University of Technology, Japan*)
- P035B Recovery of Filler Network Ruptured in Carbon Black Filled Rubber**
Yoshitomo Sato, Shuji Fujii, and Yoshinobu Isono*(*Nagaoka University of Technology, Japan*)
- P036C Nonlinear Viscoelasticity and Change in Filler Network of Filled Rubber**
H. Kondo, Y. Satoh, S. Fujii, and Y. Isono(*Nagaoka University of Technology, Japan*)
- P037A Viscoelastic Properties of Spatially Confined Multilamellar Vesicles**
S. Fujii* and Y. Isono(*Nagaoka University of Technology, Japan*)
- P038B Structural Analysis of Microbial Poly(ϵ -lysine)/Poly(acrylic acid) Blend by Using Solid-state NMR**
Shiro Maeda*¹, Yasuhiro Fujiwara¹, Chizuru Sasaki², and Ko-Ki Kunimoto³(¹*University of Fukui, Japan*; ²*The University of Tokushima, Japan*; ³*Kanazawa University, Japan*)
- P039C Characterization of Microbial Poly(ϵ -L-lysine)/Carboxy Methyl Cellulose Blends by IR and Solid State ¹³C and ¹⁵N NMR Spectroscopies**
Shiro Maeda^{1,*}, Kumiko Kato¹, Chizuru Sasaki², and Ko-Ki Kunimoto³(¹*University of Fukui, Japan*; ²*The University of Tokushima, Japan*; ³*Kanazawa University, Japan*)
- P040A In situ Analysis Using FT-IR Spectroscopy for Polymers-ozone Reaction**
Makoto Arisawa, Wingky Kurniawan, and Takaomi Kobayashi*(*Nagaoka University of Technology, Japan*)
- P041B Phase Structure and Crystallization of Ethylene-Isoprene Block Copolymers and Their Blends with Corresponding Homopolymers**
Yuanji Gao, Yusuke Takata, Hiroki Takeshita, Katsuhiko Takenaka, and Tomoo Shiomi*(*Nagaoka University of Technology, Japan*)
- P042C Synthesis of Styrene-Diene Block Copolymer Containing Chiral Amide Function and Its Application to Optical Resolution of Amino Acids**
Shino Nakagawa, Masamitsu Miya, Hiroki Takeshita, Katsuhiko Takenaka,* and Tomoo Shiomi(*Nagaoka University of Technology, Japan*)
- P043A Adhesive Bonding of Metal Nanowires**
Takaaki Toriyama and Tsutomu Ishiwatari*(*Shinshu University, Japan*)
- P044B Construction of Cyclodextrin-Carbon Nanotube Hybrids**
Tomoki Ogoshi¹, Tada-aki Yamagishi¹, Yoshiaki Nakamoto¹, and Akira Harada^{2,*}
(¹*Kanazawa University, Japan*, ²*Osaka University, Japan*)
- P045C Postgraft Polymerization of Styrene from Poly(ethylene glycol)-grafted C₆₀**

Fullerene by Grafting-from Method

H. Wakai, T. Momoi, T. Shinno, T. Yamauchi, and N. Tsubokawa* (*Niigata University, Japan*)

P046A Grafting of Polymers onto Carbon Microcoil by Use of Carboxyl Groups on the Surface and Dispersibility of the Polymer-grafted Carbon Microcoil

Yuji Nishida¹, Kazuhiro Hujiki², Takeshi Yamauchi¹, Norio Tsubokawa^{1,*}, Kenji Kawabe³, Yukio Hishikawa³, and Seiji Motojima⁴ (¹*Niigata University, Japan*; ²*Joetsu University of Education, Japan*; ³*CMC Technology Development Co. Ltd., Japan*; ⁴*Gifu University, Japan*)

P047B Immobilization of Capsaicin onto Hyperbranched Poly(amidoamine)-grafted Silica Nanoparticle and its Biorepellent Property

Tomoya Saito, Wei Gang, Kumi Shirai, Takeshi Yamauchi, and Norio Tsubokawa* (*Niigata University, Japan*)

P048C Preparation and Properties of Flame Retardant-immobilized Silica Nanoparticle

Akira Yuki, Takeshi Yamauchi, and Norio Tsubokawa* (*Niigata University, Japan*)

P049A Grafting of Polybutadiene onto Silica Nanoparticle and Carbon Black Surface in the Presence of Sc(OTf)₃

Masaaki Takamura, Takeshi Yamauchi, and Norio Tsubokawa* (*Niigata University, Japan*)

P050B Grafting of Antibacterial Polymers onto Silica Nanoparticle and Their Properties

Yoko Takeuchi, Wei Gang, Kumi Shirai, Takeshi Yamauchi, and Norio Tsubokawa* (*Niigata University, Japan*)

P051C Surface Grafting of Poly(amidoamine) onto Silica Nanoparticles in Solvent-Free Dry-System

Norio Tsubokawa, Jun Ueda, and Takeshi Yamauchi (*Niigata University, Japan*)

P052A Preparation of Polymer Gels with Ionic Liquids as Solvent and Its Functional Evaluation

Yoshihide Ito, Takeshi Yamauchi,* and Norio Tsubokawa (*Niigata University, Japan*)

P053B Electrical Properties of Polypyrrole/Calcium Alginate Composite Gel

Shotaro Kon, Takeshi Yamauchi,* and Norio Tsubokawa (*Niigata University, Japan*)

P054C Preparation of High Molecular Weight Phenolic Resins

Wang Pengfei, Tada-Aki Yamagishi,* Tomoki Ogoshi, and Yoshiaki Nakamoto (*Kanazawa University, Japan*)

P055A Preparation of Poly(arylenemethylene)s Derived from Multi-substituted Aromatic Series and Evaluation of Their Properties

Tadamasa Nemoto, Ataru Kobayashi, and Gen-ichi Konishi* (*Tokyo Institute of Technology, Japan*)

P056B Copolymerization of Vinyl Ether with a Tricyclodecane Unit and n-Butyl Vinyl Ether: Synthesis of New Polymeric Materials Consisting of Poly(vinyl ether) Backbones

Takeshi Namikoshi¹ and Tamotsu Hashimoto^{2,*} (¹*Niigata University, Japan*; ²*University of Fukui, Japan*)

- P057C Preparation of (A)_f-star-(B)₁ Star Block Copolymers via Anionic Living Polymerization of Macromonomers**
Tepei Yamazaki, Yasunari Hayashino, and Kazunori Se* (*University of Fukui, Japan*)
- P058A RAFT Polymerization of *N,N*-Diethyl-2-methylene-3-butenamide**
Masahito Matsui, Masamitsu Miya, Hiroki Takeshita, Katsuhiko Takenaka,* and Tomoo Shiomi (*Nagaoka University of Technology, Japan*)
- P059B Phase Structure of Block Copolymers Consisting of Two Liquid Crystalline Components**
Shin-ichi Taniguchi, Takebumi Abe, Masamitsu Miya, Hiroki Takeshita, Katsuhiko Takenaka, and Tomoo Shiomi* (*Nagaoka University of Technology, Japan*)
- P060C Phase Structure of Liquid Crystalline Block Copolymers Having a Rubbery Amorphous Component**
Noriaki Okumura, Shin-ichi Taniguchi, Masamitsu Miya, Hiroki Takeshita, Katsuhiko Takenaka and Tomoo Shiomi* (*Nagaoka University of Technology, Japan*)
- P061A Asymmetric Induced Copolymerization of Achiral Phenylacetylene with a Chiral Amino Group**
Mohammed Hoda, Masahiro Teraguchi, Masayuki Sato, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P062B Application of Chiral Helical Poly(phenylacetylene)s for Optical Resolution**
S. Hadano^{1,2}, M. Teraguchi¹, T. Kaneko¹, and T. Aoki¹* (¹*Niigata University, Japan*, ²*Kyoto University, Japan*)
- P063C Synthesis and Attempts of Helix-sense-selective Polymerization of Achiral Phenylacetylenes Having Two Alkylamido Groups**
Chen Chen Liu, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P064A The Control of the Helix Sense in the Copolymerization of (4-Ethynylphenyl)galvinoxyl by the Composition of Comonomer**
Yasuhiro Umeda, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P065B Synthesis of One-handed Helical Polyphenylacetylenes Stable in Solution by Removing the Chiral Groups from Poly(phenylacetylene having chiral groups) in Membrane State**
Yunosuke Abe, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P066C Synthesis of Chiral Polyphenylacetylenes Bearing a One-handed Helical Backbone and Photo-responsive Side Chains**
Ippe Suzuki, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P067A Helix-sense-selective Polymerization of Phenylacetylene Having Two Aminoalcohol Residues**
Kazuki Matsumoto, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)

- P068B Helix-sense-selective Polymerization of 3,5-Bis(hydroxymethyl)-4-benzyloxyphenylacetylene Bearing Galvinoxyl, and Chiroptical and Magnetic Properties**
Hiroo Katagiri, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P069C Asymmetric-induced Polymerization of Phenylacetylene Having Two Hydroxyl Groups and a Chiral Pinanylsilyl Group**
Jia Hongge, Kazuomi Mottate, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P070A Attempt to Living Helix-sense-selective Polymerization of Achiral Phenylacetylenes by MoOCl₄ or WOCl₄-alkylating agent-chiral alcohol**
Motohiro Kiuchi, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P071B Synthesis of TEMPO-pendant Poly(phenylacetylene)s, and Their Chiroptical and Magnetic Properties**
Atsuko Kawami, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P072C Magnetic Properties of TEMPO Radicals Included in a Supramolecular Anthracene Derivative**
Masayuki Sato, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P073A Synthesis of Poly(binaphthyl-6,6'-diylethynylene-1,3-phenyleneethynylene)-based Chiral Polyradical Bearing Galvinoxyl, and Its Chiroptical and Magnetic Properties**
Hiromasa Abe, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P074B Synthesis of Oligo(anthryleneethynylene)-based Foldamers Containing Stable Radicals**
Kensuke Ochiai, Takashi Kaneko,* Takeshi Namikoshi, Edy Marwanta, Masahiro Teraguchi, and Toshiki Aoki (*Niigata University, Japan*)
- P075C Synthesis of Chiral Helical Poly(phenyleneethynylene) Membranes by Desubstitution of Chiral Group**
Makoto Inoue, Masahiro Teraguchi, Takeshi Namikoshi, Edy Marwanta, Takashi Kaneko, and Toshiki Aoki* (*Niigata University, Japan*)
- P076A Synthesis of Poly(*p*-benzamide)s Bearing α -Branched Chiral Alkyl Side Chain and Investigation of Their Chiral Conformation**
Tomoaki Saiki, Akihiro Yokoyama, and Tsutomu Yokozawa* (*Kanagawa University, Japan*)
- P077B Investigation of Catalyst-transfer Condensation Polymerization for the Synthesis of Well-defined Polypyridine**
Yutaka Nanashima, Akihiro Yokoyama, and Tsutomu Yokozawa* (*Kanagawa University, Japan*)
- P078C Synthesis of a Variety of Well-defined *N*-Alkyl Poly(*m*-benzamide)s and Their**

Block Copolymers by Chain-growth Condensation Polymerization

Tomoyuki Ohishi, Akihiro Yokoyama, and Tsutomu Yokozawa (*Kanagawa University, Japan*)

P079A Development of Chain-growth Condensation Polymerization of Monomer Immobilized on Solid-support: Model Reaction and Polymerization

Ryota Negishi, Yoshio Kabe, Kazuo Yamaguchi, Akihiro Yokoyama, and Tsutomu Yokozawa* (*Kanagawa University, Japan*)

P080B Knoevenagel Reactions in Water Catalyzed by Immobilized Organomolecular Catalyst

Hisahiro Hagiwara,* Kohei Isobe, Ayuko Numamae, Takashi Hoshi, Toshio Suzuki (*Niigata University, Japan*)

P081C Biphenylene-containing Ruthenocenyolphosphine Designed as a Novel Phosphine-arene Ligand: Application to Pd-Catalyzed Suzuki-Miyaura Reaction

Takashi Hoshi,* Ippei Saitoh, Taichi Nakazawa, Toshio Suzuki, and Hisahiro Hagiwara* (*Niigata University, Japan*)

P082A Framework-rearrangement Reaction of Completely-condensed Octa(aryl) octasilsequioxane (ARYL-T8)

Ze Li and Yusuke Kawakami* (*Japan Advanced Institute of Science and Technology, Japan*)

P083B Synthesis and Chemical Properties of Polyfluorinated Porphyrins

Yusuke Hoshina¹, Akihiro Suzuki^{2*} (¹*Nagaoka University of Technology, Japan*; ²*Nagaoka National College of Technology, Japan*)

P084C Bioactive Cardenolides from the Stems and Twings of *Nwrium Oleander*

Liyan Wang¹, Ming Zhao¹, Liming Bai^{1,5}, Asami Toki¹, Toshiaki Hasegawa², Midori Kikuchi², Mariko Abe², Jun-ichi Sakai¹, Ryo Hasegawa¹, Yuhua Bai^{1,7}, Tomokazu Mitsui³, Hirotsugu Ogura³, Takao Kataoka³, Seiko Oka⁴, Hiroko Tsushima⁴, Miwa Kiuchi⁴, Katutoshi Hirose⁵, Akihiro Tomida⁶, Takashi Tsuruo⁶, and Masayoshi Ando^{1,7} (¹*Niigata University, Japan*; ²*Mitsubishi Gas Chemical Company, Inc., Japan*; ³*Tokyo Institute of Technology, Japan*; ⁴*Hokkaido University, Japan*; ⁵*KNC Laboratories Co. Ltd., Japan*; ⁶*Japanese Foundation for Cancer Research, Japan*; ⁷*Qiqihar University, China*)

P085A Photolithographic Properties of Ultrathin Polymer Langmuir-Blodgett Films Containing Naphthyl Group

Wenjian Xu, Tiesheng Li,* Gouliang Zeng, Suhua Zhang, Wei Shang, and Yangjie Wu* (*Zhengzhou University, China*)

P086B Polymer Langmuir-Blodgett Films Using for Pattern Transformation

Guoliang Zeng, Tiesheng Li,* Wei Shang, Wenjian Xu, Jun Wang, Suhua Zhang, and Yangjie Wu* (*Zhengzhou University, China*)

P087C Atomic Force Microscopy Studies on Langmuire-Blodgett Films of "Tailed" Porphyrin

Wei Shang, Pingping Liu, Jun Wang, Wenjian Xu, Tiesheng Li,* Luyuan Mao, Suhua Zhang, Guoliang Zeng Bing Mu, and Yangjie Wu (*Zhengzhou University, China*)

P088A Studies on the Characteristics of Langmuir-Blodgett Films of Amphiphilic

Cyclopalladated Ferrocenylimines

Bing Mu, Tiesheng Li,* Pingping Liu, Wei Shang, Wenjian Xu, and Yangjie Wu*
(Zhengzhou University, China)

P089B Synthesis and Solid-stated Polymerization Behavior of Diacetylene Derivative

Lei Zhang, Tiesheng Li,* Shengli Gao, and Yangjie Wu*(Zhengzhou University, China)

P090C Molecular Ordering of 1-TNATA Thin Films and Organic Electroluminescence Device Properties

Dosoon Kang, So Hyun Park, Phuong Thanh Vu, Young-Rae Cho, Dae-Won Park, and Youngson Choe (Pusan National University, Korea)

P091A Sensitization Reaction of the Oxime Type Photoacid Generator for Photolithography

Tomoaki Tsumita, Shota Suzuki, and Shigeru Takahara*(Chiba University, Japan)

P092B Multiple Electrochromic Performance of an All-solid Electrochromic Device Using A WO₃ / Tris(2,2'-bipyridine)ruthenium(II) / Polymer Hybrid Film

Koji Sone, Satomi Iijima, and Masayuki Yagi*(Niigata University, Japan)

P093C Different Effects Due to Shape Configuration in Three-layer Electroactive Polymers

Josue F. Guzman L., Jorge A. Cortes R., Sergio Gallegos C., Lucio Florez C., and Manuel Martinez M. (Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Mexico)

P094A Visible Light Induced Photocurrent Generation by Perylene Derivatives Adsorbed on Metal Oxide Semiconductor Films in an Aqueous Solution

Takeo Takahashi, Satoru Sasagawa, Syou Maruyama, and Masayuki Yagi* (Niigata University, Japan)

P095B Catalytic Activity for Water Oxidation of Dipyridyl Pyrazole-bridged Dinuclear Ruthenium Complex in a Heterogeneous System

Shouhei Tajima and Masayuki Yagi*(Niigata University, Japan)

P096C Substituent Effects on Catalytic Activity for Water Oxidation by Di- μ -oxo Manganese Complex Supported by Clay Compounds

Hirosato Yamazaki and Masayuki Yagi*(Niigata University, Japan)

P097A Water Oxidation Catalysis by [Ru(TERPY)LOH₂]²⁺ (L = Bidentate Ligand) Complexes Adsorbed in Layer Compounds

Manabu Komi and Masayuki Yagi*(Niigata University, Japan)

P098B Artificial Model of Photosynthetic PS II: Photochemical Production of O₂ from Water by a Di- μ -oxo Manganese Complex in a Heterogeneous System

Satoshi Yamada, Mayuu Toda, and Masayuki Yagi*(Niigata University, Japan)

P099C Inverted Bulk-heterojunction Organic Solar Cells Using a Sol-gel-derived Titanium Oxide Thin Film as an Electron Injection Electrode Inserted into ITO/Organic Solid Layer Interface

Takayuki Kuwabara, Yasunori Sigeyama, Takahiro Yamaguchi, and Kohshin Takahashi*(Kanazawa University, Japan)

- P100A Inverted Bulk-heterojunction Organic Solar Cells Using an Electrodeposited Zinc Oxide Thin Film as Electron Injection Electrode**
Yoshitaka Kawahara, Takayuki Kuwabara, Takahiro Yamaguchi, and Kohshin Takahashi* (*Kanazawa University, Japan*)
- P101B Inverted Bulk-heterojunction Organic Solar Cells Using an Electrodeposited Titanium Oxide Thin Film**
Hirokazu Sugiyama, Takayuki Kuwabara, Takahiro Yamaguchi, and Kohshin Takahashi* (*Kanazawa University, Japan*)
- P102C Inverted Bulk-heterojunction Organic Solar Cells Using a Self-assembled Zinc Sulfide Thin Film as an Electron Injection Electrode Inserted into ITO/Organic Solid Layer Interface**
Masayuki Nakamoto, Takayuki Kuwabara, Takahiro Yamaguchi, and Kohshin Takahashi* (*Kanazawa University, Japan*)
- P103A Anodic Oxidation of Methanol on Hydrophobic Nickel Electrode**
Masaki Igarashi and Yasushi Ono (*Niigata University, Japan*)
- P104B Preparation of Electroconductive Polymer Film by Dip Coating Method and Its Characterization**
Atsushi Tamura and Yasushi Ono* (*Niigata University, Japan*)
- P105C Electropolymerization of Pyrrole in Ionic Liquid Diluted by the Organic Solvent**
Daichi Mori and Yasushi Ono (*Niigata University, Japan*)
- P106A Indirect Electroorganic Reaction with Oxygen Reduction on Hydrophobic Silver Granules Cathode**
Tomohiro Shiota and Yasushi Ono (*Niigata University, Japan*)
- P107B Application of Layered Tantalum Oxides Nanosheet to Photocatalytic Reaction**
Yoshiyuki Mori, Hidetoshi Kibe, Kazuyoshi Uematsu, Kenji Toda,* and Mineo Sato (*Niigata University, Japan*)
- P108C Melt Synthesis and Morphology Control of Phosphor Materials**
Kenji Toda^{1,*}, Masafumi Hosoume¹, Kazuyoshi Uematsu¹, Mineo Sato¹, Tadashi Ishigaki², and Masahiro Yoshimura² (¹*Niigata University, Japan*; ²*Tokyo Institute of Technology, Japan*)
- P109A Removal of Fluorine from Waste Water by Ettringite**
Kenji Sato, Hiroko Morinaga, Toshiaki Tokumitsu, Kazuyoshi Uematsu, Kenji Toda, and Mineo Sato (*Niigata University, Japan*)
- P110B Preparation of KNbO₃ Thin Film at Room Temperature**
Toshinari Takahashi, Kazuyoshi Uematsu, Kenji Toda,* and Mineo Sato (*Niigata University, Japan*)
- P111C Development of Novel Phosphor for a White LED**
Yoshitaka Kawakami, Akira Komeno, Kazuyoshi Uematsu, Kenji Toda,* and Mineo Sato (*Niigata University, Japan*)

- P112A New Photocatalyst of Metal Oxides with d^{10} Configuration**
Hironori Ishikawa, Kazuyoshi Uematsu, Kenji Toda,* and Mineo Sato(*Niigata University, Japan*)
- P113B Low Temperature Growth of Potassium Niobate Single Crystal**
Akihiro Iida, Kazuyoshi Uematsu, Kenji Toda,* and Mineo Sato (*Niigata University, Japan*)
- P114C Photocatalytic Activity of Bismuth Layered Perovskite Treated with Acid**
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