

Tuesday, March 8th

Plenary Lectures: 40 min (Presentation) + 5 min (Discussion)

Special Lectures: 25 min (Presentation) + 5 min (Discussion)

General Lectures: 10 min (Presentation) + 5 min (Discussion)

Poster Previews: 1 min (Presentation), No Discussion

Plenary Lecture (9:00-9:45)

- 1S-1 Science and Industrial Applications of Nano-carbon Materials
○Sumio Iijima

General Lecture (9:45-10:30)

Properties and Applications of Nanotubes

- 1-1 Probing surfactant molecules on SWCNTs by Raman spectroscopy
Daisuke Nishide, Shunjiro Fujii, Takeshi Tanaka, ○Hiromichi Kataura
- 1-2 Evaluation of single-walled carbon nanotubes dispersed in surfactant solution by using Raman spectroscopy
○Shinzo Suzuki, Masayuki Awazu, Yasuro Ikeda, Yuuya Hatano, Midori Nakanishi, Takashi Mizusawa, Akira Ono, Toshiya Okazaki, Yohji Achiba
- 1-3 Exciton-Exciton Interactions in Thin SWNTs Extracted from DWNTs
○Takeshi Koyama, Yasumitsu Miyata, Hisanori Shinohara, Hideo Kishida, Arao Nakamura

Coffee Break (10:30-10:45)

General Lecture (10:45-11:45)

Properties and Applications of Nanotubes

- 1-4 Continuous Carrier Tuning in Metallic and Semiconducting SWNT Film
○Hidekazu Shimotani, Satoshi Tsuda, Hongtao Yuan, Yohei Yomogida, Rieko Moriya, Taishi Takenobu, Kazuhiro Yanagi, Yoshihiro Iwasa
- 1-5 Carrier mobility and on/off ratio of carbon nanotube thin-film transistors fabricated by gas-phase filtration and transfer process
○Dong-Ming Sun, Marina Y. Timmermans, Ying Tian, Albert G. Nasibulin, Shigeru Kishimoto, Takashi Mizutani, Esko I. Kauppinen and Yutaka Ohno
- 1-6 High mobility thin-film transistors using length-sorted semiconducting single-wall carbon nanotubes
○Kazunari Shiozawa, Yasumitsu Miyata, Yuki Asada, Yutaka Ohno, Ryo Kitaura, Takashi Mizutani and Hisanori Shinohara
- 1-7 Highly Flexible All-SWNT Field-Effect Transistor
○Shinya Aikawa, Erik Einarsson, Shohei Chiashi, Junichiro Shiomi, Eiichi Nishikawa, Shigeo Maruyama

Lunch Time (11:45-13:00)

General Lecture (13:00-14:15)

Properties and Applications of Nanotubes

- 1-8 Infrared Solar Cell Based on C₆₀ Encapsulated Semiconducting Single-Walled Carbon Nanotubes
○Yongfeng Li, Soichiro Kodama, Toshiro Kaneko, and Rikizo Hatakeyama
- 1-9 Metal-free Fuel Cell Cathode Catalyst Prepared by Carbonization of Polybenzimidazole-wrapped Carbon Nanotubes
○Takeshi Uchinoumi, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1-10 Improved Dispersibility of Single-walled Carbon Nanotubes (SWNTs) Using Subtle Growth Ambient and Its Enhancement of Conductivity in SWNT/Polymer Composites
○Yoshiyuki Nonoguchi, Don N. Futaba, Seisuke Ata, Motoo Yumura, Kenji Hata
- 1-11 Carbon Nanotubes with Temperature-Invariant Creep and Creep-Recovery from -150°C to 970°C
○Ming Xu, Don N. Futaba, Motoo Yumura, Kenji Hata
- 1-12 Applications of optical responsive carbon nanotubes cell cultured substrate
○Takao Sada, Tsuyohiko Fujigaya, Naotoshi Nakashima

Coffee Break (14:15-14:30)

Special Lecture (14:30-15:00)

- 1S-2 The Advantages and Applications of Nanocarbon Phase Transformations
○Amanda S. Barnard

General Lecture (15:00-16:00)

Hybrid Carbon

- 1-13 Development of Multi-stage Ion Trap Mobility System
Masashi Shinozaki, Yoshihiko Sawanishi, ○Toshiki Sugai
- 1-14 Electronic States of Linear Polyynes Embedded in Nano-Structured Molecular Assemblies
○Tomonari Wakabayashi, Mao Saikawa, Masashi Teshiba, Yoriko Wada
- 1-15 Size-Dependent Cellular Uptake of Carbon Nanoparticles
○Minfang Zhang, Xin Zhou, Yoshio Tahara, Sumio Iijima, Masako Yudasaka
- 1-16 HRTEM observation of the platinum clusters interacting with carbon atoms at elevated temperatures
○Keita Kobayashi, Kazu Suenaga

Poster Preview (16:00-17:00)

Poster Session (17:00-18:20)

Formation and Purification of Nanotubes

- 1P-1 Carbon Nanotube Growth on ZnO(000-1) Substrates using Alcohol Gas Source Method
○Tomoyuki Tsutsui, Takayasu Iokawa, Takahiro Maruyama, Shigeya Naritsuka
- 1P-2 QM/MD Simulations of Carbon Nanotube Cap Nucleation Using Acetylene Feedstock and an Fe₃C Catalyst Nanoparticle
○Ying Wang, HuJun Qian, Alister J. Page, Keiji Morokuma, Stephan Irle
- 1P-3 PERIPUTOS: Purity Evaluation of SWCNTs Using Raman Spectroscopy, Effect of Surfactants
○Miki Taga, Daisuke Nishide, Shunjiro Fujii, Takeshi Tanaka, and Hiromichi Kataura
- 1P-4 Low Pressure Growth of SWNT using Pt catalyst by Alcohol Gas Source Method in High Vacuum
○Yoshihiro Mizutani, Takahiro Maruyama, Shigeya Naritsuka, Sumio Iijima
- 1P-5 Comparison of Carbon Nanotube Growth from 4H-SiC and 6H-SiC by Surface Decomposition using Raman Spectroscopy
○Yuki Ishiguro, Satoshi Sakakibara, Hiroaki Ito, Takahiro Maruyama, Shigeya Naritsuka
- 1P-6 Novel atomization and dispersion method of CNT using wet-type super atomizer "Nanovater"
○Tadashi Takashima, Yumi Murai, Kunio Miyashiro, Katsuyuki Utaka, Shin-ichiro Kato, Yusuke Miyazaki
- 1P-7 Molecular-assembled synthesis of single-wall carbon nanotubes
○Yasumitsu Miyata, Marie Suzuki, Jinying Zhang, Miho Fujihara, Ryo Kitaura, Hiromichi Kataura, Hisanori Shinohara
- 1P-8 Effect of Sn catalyst concentration on purity synthesis of carbon nanocoil by substrate CVD with catalytic vapor supply
○Yuichi Ishii, Kotaro Takimoto, Yoshiyuki Suda, Hideto Tanoue, Hirofumi Takikawa, Hitoshi Ue, Kazuki Shimizu, Yoshito Umeda
- 1P-9 Length Sorting of Single-Wall Carbon Nanotubes using Size Exclusion Gel Chromatography
○Satoshi Asano, Takeshi Tanaka, Hiromichi Kataura
- 1P-10 Control on the Electrochemical Process at Carbon Nanotube Synthesis at Room Temperature
Ahmed Shawky, Masahiro Tanabe, ○Satoshi Yasuda and Kei Murakoshi
- 1P-11 Selective synthesis of (6, 5) carbon nanotubes from C₆₀ precursor
○Jinying Zhang, Yasumitsu Miyata, Ryo Kitaura, and Hisanori Shinohara
- 1P-12 Synthesis of Multi-Walled Carbon Nanocoils over Sn/Fe/MgO Catalyst by Catalytic CVD
○Lim Siew Ling, Kotaro Takimoto, Yoshiyuki Suda, Hideto Tanoue, Hirofumi Takikawa, Hitoshi Ue, Kazuki Shimizu, Yoshida Umeda

- 1P-13 Carbon nanotube growth from C₆₀-fullerene nuclei with various source gases
Daisuke Takagi, Fumihiko Maeda, ○Ryota Negishi, Shogo Agata, Yoshihiro Kobayashi, Yoshikazu Homma
- 1P-14 Single-walled carbon nanotubes closing and opening: a density-functional tight-binding molecular dynamics study
○Hironori Hara, Stephan Irle
- 1P-15 Transition from [n]Cycloparaphenylenes to SWCNTs: SCC-DFTB Studies of Diels Alder Reactions and Raman Spectra
○Ryota Umeda, Yoshifumi Nishimura, Stephan Irle
- 1P-16 Extraction of high purity and micrometer-long semiconducting single-wall carbon nanotubes
○Kazunari Shiozawa, Yasumitsu Miyata, Ryo Kitaura, Hisanori Shinohara

Applications of Nanotubes

- 1P-17 Electrode Properties of Nanocarbon-Polymer Composites
○Tomohiro Sakashita, Kouki Okamura, Shinzi Kawasaki
- 1P-18 Electrical and Mechanical Properties of Carbon Nanotube/Polyisoprene Composites with Low Percolation Threshold and High Conductivity
○Tomoya Nagaoka, Ayumu Sakai, Katsumi Uchida, Koji Tsuchiya, Masayosi Ito
- 1P-19 Cell aggregation to a carbon nanotube scaffold with dielectrophoresis
○Makoto Matsuoka, Tsukasa Akasaka, Takeshi Hashimoto, Yasunori Totsuka, Fumio Watarai
- 1P-20 Influence of Device Processing on Electrical Properties of Carbon Nanotube Field Effect Transistors
○Mikito Tanaka, Yoichi Ito, Bongyong Jang, Yasuhiko Hayashi, Naoki Kishi, Tetsuo Soga, Takashi Jimbo
- 1P-21 Transparent Conductive Thin Films of Single-Wall Carbon Nanotubes Encapsulating Organic Molecules
○Naoki Kishi, Ikuma Miwa, Toshiya Okazaki, Takeshi Saito, Toshihisa Mizutani, Hiroaki Tsuchiya, Tetsuo Soga, Takashi Jimbo
- 1P-22 Thin-film transistors using aligned semiconducting single-wall carbon nanotubes separated by agarose gel chromatography
○Shunjiro Fujii, Takeshi Tanaka, Hiromichi Kataura
- 1P-23 The simple method for analyzing the interaction between carbon nanotube and molecules
○JongTae Yoo, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1P-24 Controllable Dispersity of Carbon Nanotubes
○Naoyuki Uchiyama, Naotoshi Nakashima
- 1P-25 Highly Conductive Vein-Like SWNT Network
○Kazufumi Kobashi, Seisuke Ata, Takeo Yamada, Don N. Futaba, Motoo Yumura, Kenji Hata
- 1P-26 Ion-Gel Gating of Single-Walled Carbon Nanotube Films
○Di Wen, Yohei Yomogida, Hidekazu Shimotani, Kazuhiro Yanagi, Yoshihiro Iwasa, Taishi Takenobu
- 1P-27 Hybridization of DNA/carbon nanotube hybrid with biocompatible polycation
○Tsuyohiko Fujigaya, Yuki Yamamoto, Arihiro Kano, Atsushi Maruyama, Naotoshi Nakashima
- 1P-28 Development of Carbon Nanotube/Polybenzoxazole Composite Films
○Takahiro Fukumaru, Tsuyohiko Fujigaya, Naotoshi Nakashima

Properties of Nanotubes

- 1P-29 Chirality dependence of coherent phonon amplitudes in single wall carbon nanotubes
○Ahmad-Ridwan Tresna Nugraha, Kentaro Sato, Riichiro Saito
- 1P-30 Density Functional Theory Calculations of the Cleavage of CC Bonds of Nanotubes by Diketone
○Takashi Yumura, Toshiyuki Kanemitsu
- 1P-31 G⁺/G⁻ behavior of SWCNTs under the dispersion process
○Satoko Nishiyama, Takeshi Tanaka, Hiromichi Kataura
- 1P-32 Raman spectroscopy of SWNTs grown from boron- and nitrogen-containing feedstocks
○Satoru Suzuki, Hiroki Hibino

Graphene

- 1P-33 Dependence of Raman intensity and shift on different layer stacking of graphene
○Kentaro Sato, Jin Sung Park, Riichiro Saito
- 1P-34 Polarization dependence of x-ray absorption spectra of Graphene
○Md. Tareque Chowdhury, Riichiro Saito
- 1P-35 Synthesis and Spectroscopical Characterization of Peripentacene
○Yosuke Ishii, Tomohiro Sakashita, Hidenori Kato, Masashige Takatori, Shinji Kawasaki
- 1P-36 Chemical and Electrical Characterization of Graphene Formed by Gallium Flux Liquid Phase Epitaxy
○Michael V. Lee, Hidefumi Hiura, Anastasia V. Tyurmina, and Kazuhito Tsukagoshi
- 1P-37 Synthesis of Single-Layer Graphenes by Atmospheric Alcohol-Chemical Vapor Deposition
○Akiji Fukaya, Naoki Kishi, Ryo Sugita, Tetsuo Soga, Takashi Jimbe
- 1P-38 Quantum capacitance of mono- bi- and tri-layer graphene with different stacking orders
○Takahiro Eguchi, Kentaro Sato and Riichiro Saito
- 1P-39 Structural Changes of Carbon Nanowalls by Heat Treatment in Vacuum
○Seiya Suzuki, Masamichi Yoshimura
- 1P-40 Electronic-structure control of thin film of graphite: Interlayer spacing and thickness dependency
○Nguyen Thanh Cuong, Minoru Otani, Susumu Okada
- 1P-41 QM/MD Simulation of Graphene Hole Repair by C₂ molecules
○Yoshitaka Okita, Hironori Hara, Lili Liu, Stephan Irl

Hybrid Carbon

- 1P-42 Field Emitter Using Upright Carbon Nanotwists with sputtered Pt coat
○Yuki Sugioka, Yoshiyuki Suda, Hideto Tanoue, Hirofumi Takikawa, Hitoshi Ue, Kazuki Shimizu, Yoshito Umeda
- 1P-43 Evaluation of Dispersant Effectiveness of Lipid-PEG For Nano-Carbons Using Carbon Nanohorns
Mei Yang, Momoyo Wada, Minfang Zhang, Kostas Kostarelos, Sumio Iijima, Mitsutoshi Masuda,
○Masako Yudasaka
- 1P-44 Long-term Structural Observation of Charged Particles by Ion Trap Mobility System
○Yoshihiko Sawanishi, Masashi Shinozaki, Toshiki Sugai
- 1P-45 Preparation of supercapacitor using RuOx-supported-Arc-Black and its specific capacitance
○Toshiyuki Sato, Takashi Ikeda, Yoshiyuki Suda, Hideto Tanoue, Hirofumi Takikawa, Shinichiro Oke, Hitoshi Hue, Takashi Okawa, Nobuyoshi Aoyagi, Kazuki Shimizu

Candidates for the Young Scientist Poster Award

- 1P-46 Electron-accepting properties of fullerenes at the liquid/liquid interface
○Tsugumi Hayashi, Tomohiko Okugaki, Hideyuki Takahashi, Kohji Maeda, Kazuyuki Tohj
- 1P-47 Facile and efficient synthesis of high-crystallinity double-wall carbon nanotubes
○Toshiya Nakamura, Yasumitsu Miyata, Hong En Lim, Ryo Kitaura, Hisanori Shinohara
- 1P-48 Sorting of double-wall carbon nanotubes by electronic structure
○Miho Fujihara, Yasumitsu Miyata, Marie Suzuki, Ryo Kitaura, Hisanori Shinohara
- 1P-49 Electronic Spectra of Polyyne-Iodine Complexes in Hexane
○Yoriko Wada, Tomonari Wakabayashi
- 1P-50 Significance of zigzag edges in electron transport properties of graphene sheets with periodic nanoholes
○Hideyuki Jippo, Mari Ohfuchi, Chioko Kaneta
- 1P-51 Spin-Related Novel Optical Phenomena in Single-Walled Carbon Nanotubes
○Satoru Konabe, Susumu Okada
- 1P-52 Synthesis and characterization of AgI nanowires encapsulated in carbon nanotubes
○Shin-ichi Ito, Ryo Kitaura, Teppei Yamada, Hiroshi Kitagawa, Dong Yong Kim, Suguru Noda, Hirofumi Yoshikawa, Kunio Awaga, Hisanori Shinohara
- 1P-53 Control of graphene etching by atomic structure of solid surfaces
○Takahiro Tsukamoto, Toshio Ogino
- 1P-54 Structures and Electronic Properties of Scandium Carbide Endohedral Metallofullerenes
○Naomi Mizorogi, Takeshi Akasaka, Shigeru Nagase

Wednesday, March 9th

Special Lectures: 25 min (Presentation) + 5 min (Discussion)

General Lectures: 10 min (Presentation) + 5 min (Discussion)

Poster Previews: 1 min (Presentation), No Discussion

Special Lecture (9:00-9:30)

- 2S-3 Application of Flat-Panel Field Emission Lamp using Carbon Nanotube-Carbon Nanohorn Cathodes
○Ryota Yuge

General Lecture (9:30-10:30)

Formation and Purification of Nanotubes

- 2-1 Cyclic purification of semiconducting and metallic carbon nanotubes using separation by Electric-field inducing Layer Formation
○Kazuki Ihara, Takeshi Saito, Fumiyuki Nihey
- 2-2 Diameter-Based Separation of Single-Walled Carbon Nanotubes through Selective Extraction with Dipyrene Nanotweezers
○Naoki Komatsu, A. F. M. Mustafizur Rahman, Feng Wang, Kazunari Matsuda, Takahide Kimura
- 2-3 Effect of Sonication on the Length Distribution of Single Wall Carbon Nanotubes
○Shigekazu Ohmori, Takeshi Saito, Yuki Asada, Motoo Yumura, Sumio Iijima
- 2-4 QM/MD Simulation of SWNT Nucleation on Transition-Metal Carbide Nanoparticles
○Stephan Irle, Alister J Page, Honami Yamane, Y. Ohta, Keiji Morokuma

Coffee Break (10:30-10:45)

General Lecture (10:45-11:45)

Graphene

- 2-5 Stacking-order sensitive Raman modes of graphene
○R. Saito, K. Sato, C. Cong, Y. Ting, M. S. Dresselhaus
- 2-6 Energetics and Electronic Structures of Graphene Adsorbed on HfO₂ Surfaces
○Katsumasa Kamiya, Naoto Umezawa, Susumu Okada
- 2-7 Large area graphene from camphor for organic solar cells application
○Golap Kalita, Masahiro Matsushima, Koichi Wakita and Masayoshi Umenc
- 2-8 Analysis of Magneto Resistance Fluctuation in graphene thin film
○A. Mahjoub, Shotarou Motooka, Tkuto Abe, Nobuyuki Aoki, D. K.Ferry, J. P. Bird, Yuuichi Ochiai

Lunch Time (11:45-13:00)

Awards Ceremony (13:00-13:45)

Special Lecture (13:45-14:15)

- 2S-4 Fundamentals and Recent Progress of Organic Thin-film Solar Cells
○Masahiro Hiramoto

General Lecture (14:15-15:15)

Fullerenes

- 2-9 Fullerene Peapod-Poly(3-hexylthiophene) Hybrids
○Tomokazu Umeyama, Noriyasu Tezuka, Yoshihiro Matano, Hiroshi Imahor
- 2-10 Synthesis and Photophysical Properties of Metallofullerenes—Zinc Porphyrin Conjugates: Impact of Endohedral Clusters
○Lai Feng, Shankara Gayathri Radhakrishnan, Naomi Mizorogi, Zdenek Slanina, Hidefumi Nikawa, Takahiro Tsuchiya, Takeshi Akasaka, Shigeru Nagase, Nazario Martı́n, Dirk M. Guldi
- 2-11 Electronic structure and entrapped cluster structure of C₇₈ endohedral fullerenes
○Takafumi Miyazaki, Yusuke Aoki, Sousuke Ookita, Hajime Yagi and Shojun Hinc
- 2-12 Photo-polymerization of C₆₀ thin film using optical vortex irradiation
○Nobuyuki Aoki, Tatsuya Doi, Xiaojun Wei, Kyouhei Koyama, Katsuhiko Miyamoto, Takashige Omatsu, Jonathan P. Bird and Yuichi Ochiai

Coffee Break (15:15-15:30)

General Lecture(15:30-16:15)

Fullerenes

- 2-13 Synthesis of Polyhydroxylated Fullerene $C_{60}(OH)_6$ via Chlorofullerene $C_{60}C_{16}$ and its Characterization using ESI-MS Spectroscopy
○Hiroshi Ueno, Toshiki Sugai, Hiroshi Moriyama
- 2-14 Thermal and oxidative stabilities of multi-arylated [60]fullerene derivatives
○Ken Kokubo, Miyato Kashiwara, Yano Tomomi, Katsutomo Tanaka, Naohiko Ikuma, Takumi Oshima
- 2-15 Influence of UV Irradiation on Polymerization of LLIP-Prepared C_{60} Nanowhiskers
○Ying-Hui Wang, Kun'ichi Miyazawa

Poster Preview (16:15-17:10)

Poster Session (17:10-18:30)

Applications of Nanotube

- 2P-1 Synthesis and Applications of Carbon Nanotube Sponge Macrostructures
Xuchun Gui, Tianzhun Wu, ○Rong Xiang, Zikang Tang
- 2P-2 Cell proliferation on Carbon Nanotubes Coated Dishes in Different Cell Lines
○Tsukasa Akasaka, Makoto Matsuoka, Atsuro Yokoyama, Takeshi Hashimoto
- 2P-3 Synthesis and characterization of highly conducting Carbon nanotube-Copper composite
○Chandramouli Subramaniam, Takeo Yamada, Don. N. Futaba, Kenji Hata
- 2P-4 Formation of trans-polyacetylene from CoMoCAT carbon nanotubes by laser irradiation
Mari Hakamatsuka, ○Fumiaki Watanabe, Masaru Tachibana
- 2P-5 Spinning multiwalled carbon nanotube fibers and sheets
○Yoku Inoue, Yoshinobu Shimamura, Morihiro Okada, Hidenori Mimura, Kimiyoshi Naito
- 2P-6 Fabrication of Free-Standing Ultrathin Single-Walled Carbon Nanotube Films with Highly Conductivity and transparency
○Qingfeng Liu, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 2P-7 Ink jet carrier doping to single-walled carbon nanotube film
○Satoki Matsuzaki, Kazuhiro Yanagi, Taishi Takenobu
- 2P-8 Preparation and evaluation of polymer gel capsules containing SWNTs
○Yusuke Tsutsumi, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 2P-9 Fine patterning of single-walled carbon nanotube thin-film by surface modification
○Yuki Nobusa, Yohei Yomogida, Kazuhiro Yanagi, Taishi Takenobu
- 2P-10 Further development of Aligned Carbon Nanotube Wafer based Strain Sensors
○Takeo Yamada, Yuki Yamamoto, Yuhei Hayamizu, Yoshiki Yomogida, Ali Izadi-Najafabadi, Don N. Futaba, Motoo Yumura, Kenji Hata
- 2P-11 A simulation of an atomic-scale metal/nanotube/metal junction
○Koichi Kusakabe, Hokuto Saito

Formation and Purification of Nanotubes

- 2P-12 Growth Termination of Millimeter-Tall Single-Walled Carbon Nanotubes
○Kei Hasegawa, Suguru Noda
- 2P-13 Synthesis of Highly Aligned Carbon Nanotubes on Stainless steel substrates by a Thermal CVD Method with Camphor
○Hisashi Seta, Kiyofumi Yamagiwa, Kohei Koizumi, Yusuke Ayato, Jun Kuwano
- 2P-14 The enhancement of zigzag and near zigzag tubes in the production of single wall carbon nanotube by alcohol CVD
○Yasumichi Kayo, Yohji Achiba, Toshiya Okazaki

- 2P-15 Synthesis of CNTs by Antenna-edge Microwave Plasma CVD from Carbon dioxide and Methane Gas
○Takumi Ochiai, Kazuyosho Oohara, Iizuka Masatomo, Hiroshi Kawarada
- 2P-16 Molecular Dynamics Simulations of Metal Nanowire Formation within a SWNT and the SWNT Growth Process by Catalytic CVD
Tepei Matsuo, ○Takuya Noguchi, Shohei Chiashi, Junichiro Shiomi, Shigeo Maruyama
- 2P-17 Selective growth of SWNTs on Ir catalyst combined with a laser vaporization method
○Takuya Kodama, Akihito Inoue, Takeshi Kodama, Kenrou Hashimoto, Yohji Achiba, Toshiya Okazaki
- 2P-18 Epitaxial growth of faceted Co nanoparticles and their application to carbon nanotube growth
○Yui Ogawa, Hiroki Ago, Masaharu Tsuji
- 2P-19 New approach for chirality recognition of single-walled carbon nanotubes using fluorene-based copolymers
○Kojiro Akazaki, Hiroaki Ozawa, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 2P-20 Separation of Single-Wall Carbon Nanotubes using Four Kinds of Gel Column Chromatography
○Yang Huang, Huaping Liu, Ye Feng, Takeshi Tanaka, Shunjiro Fujii, Hiromichi Kataura
- 2P-21 Effects of carbon source and growth temperature on diameter of horizontally-aligned single-walled carbon nanotubes on sapphire
○Takafumi Ayagaki, Hiroki Ago, Masaharu Tsuji
- 2P-22 Chemical vapor deposition growth of carbon nanotubes using cluster templates
○Takuya Nakayama, Ryo Kitaura, Hironori Tsunoyama, Yasumitsu Miyata, Sun Yun, Tatsuya Tsukuda, Hisanori Shinohara
- 2P-23 Interaction-dependent Chirality Separation of Single-Wall Carbon Nanotubes by Multicolumn Gel Chromatography
○Huaping Liu, Daisuke Nishide, Takeshi Tanaka, Hiromichi Kataura
- 2P-24 Effects of Laser Wavelength and Power on the Selective Separation for Metal Single-walled Carbon Nanotubes with OPO Laser Irradiation
○Akira Kumazawa, Isamu Tajima, Katsumi Uchida, Koji Tsuchiya, Tadahiro Ishii, Hirofumi Yajima
- 2P-25 Super-growth: Combining High Yield with High Crystallinity
○Hiroe Kimura, Don N. Futaba, Motoo Yumura, Kenji Hata

Carbon Nanoparticles

- 2P-26 Purification and Characterization of Graphitic Polyhedra Grown by Laser Vaporization of Graphite Containing Silicon or Boron
○Eriko Noguchi, Iori Nozaki, Hajime Chigusa, Homare Tanogami, Akira Koshio, Fumio Koka
- 2P-27 The molecular structure and vibrational spectroscopy of hydroxylated nanodiamonds.
○Kousuke Usui, Yoshio Nishimoto, Alister J. Page, Henryk A. Witek, Stephan Irl
- 2P-28 Observation of void in DMFC electrode composed with carbon nanocoil
○Shota Kaida, Yoshiyuki Suda, Hideto Tanoue, Hirohumi Takikawa, Shin-ichiro Oke, Hitoshi Ue, Takashi Okawa, Nobuyoshi Aoyagi, Kazuki Shimizu
- 2P-29 Vibrational and NMR properties of Polyyenes and Microscopic studies of Polyyenes@SWNT
○Md. Mahbul Haque, Lichang Yin, Ahmad R. T. Nugraha, Riichiro Saito, Tomonari Wakabayash, Yohei Sato, Masami Terauchi
- 2P-30 Chromatographic Separation of Highly Soluble Nanodiamond Prepared by Polyglycerol Grafting
○Naoki Komatsu, Li Zhao, Tatsuya Takimoto, Masaaki Ito, Naoko Kitagawa, Takahide Kimura
- 2P-31 1 MeV electron irradiation-induced structural changes of nanometer-sized diamond particles
○Koji Asaka, Tomohiro Terada, Shigeo Arai, Nobuo Tanaka, Eiji Osawa, Yahach Saito
- 2P-32 Superparamagnetic behavior of carbon nanofoam produced from iron free carbon powder
○Makoto Jimno, Hirohito Asano, Takahiro Mizuno, Sumio Iijima, Shunji Bandow
- 2P-33 Synthesis of Carbon Nanowalls by a Submarine-style Substrate Heating Method
○Hiroyuki Yokoi, Fumihiro Ishihara, Tatsunori Isoda, Kentaro Takesue
- 2P-34 Evolution of the DTA-TG curves as a function of sample mass containing LaC₂ nano-crystallites encaged in multi-shell carbon nanocapsules
○Kazunori Yamamoto, Takeshi Akasaka

Graphene

- 2P-35 Chemical vapor deposition of BN-doped graphite thin films
○Satoru Suzuki, Hiroki Hibino
- 2P-36 Theoretical Study of Aromaticity by Nucleus-Independent Chemical Shifts in Nanographenes
○Yoshihiro Tsumura, Hiroyuki Fueno, Kazuyoshi Tanaka
- 2P-37 Comparison study on CVD synthesis of graphene using ethanol and dimethyl ether
○Bo Hou, Xiao Chen, Erik Einarsson, Shohei Chiashi, Shigeo Maruyama
- 2P-38 Direct Fabrication of Metal-Free Multilayer Graphene on Substrates
○Soichiro Takano, Suguru Noda
- 2P-39 Energetics and Electronic Structure of Corrugated Graphene
○Susumu Okada
- 2P-40 Spatial Modulation of Electronic Structure of Graphene on Metal Surfaces
○Yoshiteru Takagi, Susumu Okada
- 2P-41 Raman Spectroscopic Study in a Bilayer Graphene Synthesized by Alcohol Chemical Vapor Deposition Method
Makoto Okano, Ryusuke Matsunaga, ○Kazunari Matsuda, Satoshi Masubuchi, Tomoki Machida, Yoshihiko Kanemitsu
- 2P-42 All-carbon ferromagnetism derived from edge states in antidot-lattice graphenes
○Ryo Miyazaki, Kengo Tada, Syota Kamikawa, Junji Haruyama, Takashi Matsui, Hiroshi Fukuyama
- 2P-43 Selective Edge Functionalization of Graphene by Room-Temperature Mild Plasma Treatment
○Toshiaki Kato, Liying Jiao, Xinran Wang, Hailiang Wang, Xiaolin Li, Li Zhang, Rikizo Hatakeyama, and Hongjie Dai
- 2P-44 Electronic structure and band gap control of graphene with holes
○Masahiro Sakurai, Susumu Saito
- 2P-45 Density-Functional Tight-Binding Studies of Hexagonal Graphene Flakes
○Lili Liu, Francisco J. Martin-Martinez, Santiago Melchor, Jose A. Dobado, Thomas Heine, Stephan Irle

Candidates for the Young Scientist Poster Award

- 2P-46 Morphology- and Position-Selective Growth of CNT Emitters on Glasses by Subsecond Heating Pulses
○Kotaro Sekiguchi, Yosuke Shiratori, Suguru Noda
- 2P-47 Highly-Efficient Synthesis of Nitrogen Atom Endohedral Fullerene by Controlling Fullerene and Plasma Ion Behaviors
○Soon Cheon Cho, Toshiro Kaneko, and Rikizo Hatakeyama
- 2P-48 Synthesis of Nickel Atom Endohedral Fullerene Using Plasma Ion Irradiation Method with Electron Beam Gun
○Tatsuya Umakoshi, Hiroyasu Ishida, Toshiro Kaneko, Rikizo
- 2P-49 Transport Mechanisms in Single-Wall Carbon Nanotube Networks formed by Controlled Content-ratio of Metallic and Semiconducting Types
○Hiroki Udoguchi, Kazuhiro Yanagi, Yugo Oshima, Taishi Takenobu, Hiromichi Kataura, Takao Ishida, Kazuyuki Matsuda, Yutaka Maniwa
- 2P-50 The shortest nano-peapods : Complexation of fullerenes with cycloparaphenylenes
○Yusuke Nakanishi, Yasumitsu Miyata, Haruka Omachi, Sanae Matsuura, Yasutomo Segawa, Kenichiro Itami, Ryo Kitaura and Hisanori Shinohara
- 2P-51 Femtosecond Coherent Phonon Spectroscopy of Carbon Nanotubes in Different Environments
○Kotaro Makino, Hiroki Tadokoro, Atsushi Hirano, Kentaro Shiraki, Yutaka Maeda, Muneaki Hase
- 2P-52 Crystallographic features of graphene on SiC (0001)
○Wataru Norimatsu, Michiko Kusunoki
- 2P-53 Substituent Effects on the Reductive Functionalization of SWNTs
○Yuriko Chiba, Takaaki Kato, Yumi Okui, Norihisa Akamatsu, Michio Yamada, Yutaka Maeda, Tadashi Hasegawa, Takeshi Akasaka, Shigeru Nagase
- 2P-54 Generalized Preparation Method of the Catalyst for Single-Walled Carbon Nanotube Forest Growth from Various Iron Compounds
○Shunsuke Sakurai, Hidekazu Nishino, Don N Futaba, Satoshi Yasuda, Takeo Yamada, Alan Maigne, Eiichi Nakamura, Motoo Yumura, and Kenji Hata

Thursday, March 10th

Plenary Lectures: 40 min (Presentation) + 5 min (Discussion)

Special Lectures: 25 min (Presentation) + 5 min (Discussion)

General Lectures: 10 min (Presentation) + 5 min (Discussion)

Poster Previews: 1 min (Presentation), No Discussion

Plenary Lecture (9:00-9:45)

3S-5 Carrier Control of Carbon Nanotube Transistor

○Young Hee Lee

General Lecture (9:45-10:30)

Hybrid Carbon

- 3-1 Coaxially Stacked Coronene Column inside Single-Walled Carbon Nanotube
○Toshiya Okazaki, Yoko Iizumi, Shingo Okubo, Hiromichi Kataura, Zhen Liu, Kazu Suenaga, Yoshio Tahara, Masako Yudasaka, Susumu Okada, Sumio Iijima
- 3-2 Growth of Carbon Nanotubes Filled with Metal Sulfide Nanowires
○Akira Koshio, Takayuki Yamasaki, Makoto Yamamoto, Fumio Koka
- 3-3 First-principles study of K_xC_{60} encapsulated in boron-nitride nanotubes
○Takashi Koretsune, Susumu Saito, Jesse Noffsinger, Marvin L. Cohen

Coffee Break (10:30-10:45)

General Lecture (10:45-11:45)

Graphene

- 3-4 Epitaxial CVD growth of single-layer graphene over metal films crystallized on sapphire
○Hiroki Ago, Yoshito Ito, Baoshan Hu, Carlo Orofeo, Masaharu Tsuji, Noriaki Mizuta, Ken-ichi Ikeda, Seigi Mizuno
- 3-5 Low-temperature synthesis of few-layer and multi-layer graphene by chemical vapor deposition
○Daiyu Kondo, Katsunori Yagi, Kenjiro Hayashi, Shintaro Sato, Naoki Yokoyama
- 3-6 Surface Synthesis of Graphene Materials using Polyaromatic Hydrocarbon Derivatives
○Takahiro Nakae, Yoshihiro Kushida, Shingo Mizobuchi, Ryuji Ohnishi, Hisako Sato, Hiroshi Sakaguchi
- 3-7 Formation of Graphene on Insulator by Liquid Metal Flux Method
○Hidefumi Hiura, Michael V. Lee, Anastasia V. Tyurmina, Kazuhito Tsukagoshi

Lunch Time (11:45-13:00)

Special Lecture (13:00-13:30)

3S-6 Low-temperature synthesis of graphene using microwave plasma CVD

○Masataka Hasegawa

General Lecture (13:30-14:15)

Formation and Purification of Nanotubes

- 3-8 High rate growth of carbon nanotubes in tens of micrometer deep through silicon vias
○Kazuyoshi Oohara, Takumi Ochiai, Masatomo Iiduka, Hiroshi Kawarada
- 3-9 High-Density Growth of Horizontally Aligned Single Walled Carbon Nanotubes on Crystal Quartz Substrates
○Taiki Inoue, Daisuke Hasegawa, Shohei Chiashi, Shigeo Maruyama
- 3-10 Highly selective growth of (6,5) tube-Why (6,5) nanotube is so special in the growth of carbon nanotubes-
○Yohji Achia, Akihito Inoue, Takeshi Kodama, Kenro Hashimoto, Toshiya Okazaki

Poster Preview (14:15-15:10)

Poster Session (15:10-16:30)

Properties of Nanotubes

- 3P-1 Resonance Rayleigh scattering spectroscopy of CNTs grown on the optical tapered nano fiber
Takuya Nagano, Hiromasa Hirai, Keisuke Okada, Shinichiro Mouri, Kiyofumi Muro
- 3P-2 Photoemission spectroscopy of double-walled carbon nanotubes based on host metallic SWCNTs
S. Sagitani, K. Yonemori, R. Kakihara, H. Takahumi, D. Hirayama, H. Hayashi, J. Jiang, H. Iwasawa, K. Shimada, H. Namatame, M. Taguchi, H. Ishii, H. Kadowaki, K. Matsuda, K. Yanagi, Y. Maniwa
- 3P-3 Computational Chemistry Study of the Interaction between Single-walled Carbon Nanotubes and Polysaccharides
Hirofumi Yajima, Akira Itoh, Koji Tsuchiya, Hirofumi Yajima
- 3P-4 Macroscopic Wall Number Analysis of Single-walled, Double-walled, and few-walled Carbon Nanotubes by X-ray Diffraction
Don N. Futaba, Takeo Yamada, Kazufumi Kobashi, Motoo Yumura, Kenji Hata
- 3P-5 Dielectric Environment Effect on the Electronic States of (n,m) Single-Walled Carbon Nanotubes
Yasuhiko Hirana, Yasuhiko Tanaka, Yasuro Niidome, Naotoshi Nakashima
- 3P-6 Systematic First-Principles Study of Single-Walled Carbon Nanotubes with Helical-Symmetry Operation
Koichiro Kato, Takashi Koretsune, Susumu Saito
- 3P-7 Structural Stability and Electronic Manipulation of Nitrogen-doped Carbon Nanotube
Yoshitaka Fujimoto, Susumu Saito
- 3P-8 Kekule Structures and HOMO-LUMO Gaps of Armchair Carbon Nanotubes with Finite Length
Noriyuki Mizoguchi
- 3P-9 Transport property of hydrogen adsorbed carbon nanotube : first-principles density functional study
Tomoyo Kawasaki, Fumiya Ishii, Keisuke Sawada, Mineo Saito
- 3P-10 Optical response of single-walled carbon nanotubes in far-infrared region
Soon-Kil Joung, Toshiya Okazaki
- 3P-11 Transport properties of individual boron-doped carbon nanotube under pressure
Tohru Watanabe, Shirou Tomioka, Satoshi Ishii, Shunsuke Tsuda, Takahide Yamaguchi, Yoshihiko Takano

Formation and Purification of Nanotubes

- 3P-12 Redispersing Semiconducting Single Wall Carbon Nanotubes by DNA and Their Size Exclusion Chromatography
Yuki Asada, Kazuki Ihara, Shigekazu Ohmori, Fumiya Ohmori, Takeshi Saito
- 3P-13 Growth control of carbon nanotubes on a metal tip apex
Hisanori Kanayama, Kota Shimanaka, Hideki Sato
- 3P-14 Effect of Al₂O₃ Film Thickness on Growth of MWCNT Forest with Graphite Roof
Hiroki Atsumi, Kotaro Takimoto, Yoshiyuki Suda, Hideto Tanoue, Hirofumi Takikawa, Hitosi Ue, Kazuki Shimizu, Yoshito Umeda
- 3P-15 Effect of pH and NaCl Concentration on Metal/Semiconductor Separation of Carbon Nanotubes using Gel
Yasuko Urabe, Takeshi Tanaka, Hiromichi Kataura
- 3P-16 Development of large scale vertically aligned high-temperature pulsed-arc discharge
Yuuichi Abe, Toshiaki Sugai
- 3P-17 Diameter Selection techniques for Single-Wall Carbon Nanotubes With Around 1.4 nm Diameters
Takuya Suzuki, Kazuhiro Yanagi, Hirofumi Ozaki, Hiromichi Kataura, Yutaka Maniwa

Fullerenes

- 3P-18 X-ray Structure of a Divalent Metallofullerene Yb@C₈₀
Xing Lu, Naomi Mizorogi, Zdenek Slanina, Takeshi Akasaka, Shigeru Nagase
- 3P-19 Electronic Properties of M₂(C₂)@C₈₂ (M=Sc, Ti, Fe) Endohedral Metallofullerenes
Yoshio Nishimoto, Stephan Irle

- 3P-20 Electronic property of $\text{Li}@C_{60}$
 ○Naoko Ogasawara, Hajime Yagi, Masashi Zenki, Takeyuki Zaima, Takafumi Miyazaki, Morihiko Saida, Fuyuko Yamashita, Shojun Hino
- 3P-21 Most stable structure and electronic structure of endohedral fullerenes $\text{Sc}_3\text{C}_2@C_{80}$ by density functional theory calculations
 ○Sosuke Okita, Takeyuki Zaima, Hajime Yagi, Takafumi Miyazaki, Haruya Okimoto, Noriko Izumi, Yusuke Nakanishi, Hisanori Shinohara, Shojun Hino
- 3P-22 ESR measurement of $\text{N}@C_{60}$ encapsulated by γ -cyclodextrin
 ○Tatsuhisa Kato, Hiroki Shibata, Tomonari Wakabayashi
- 3P-23 Implantation of Atoms into Fullerenes using High-Frequency Sputtering Apparatus
 ○Tomonari Wakabayashi, Kosuke Sato, Naoya Kinomura, Nagisa Kumamoto
- 3P-24 Structures and Relative Stability of $\text{Gd}_2@C_{98}$
 W. Y. Gao, ○X. Zhao
- 3P-25 A large-scale consecutive synthesis of metallofullerenes
 ○Hisashi Komaki, Yusuke Nakanishi and Hisanori Shinohara
- 3P-26 An Appearance of the New Electronic State in Fullerene Nano-Whisker due to UV Polymerization
 ○Tatsuya Doi, Kyouhei Koyama, Nobuyuki Aoki, Yuichi Ochiai
- 3P-27 Optical, Electric and Magnetic Properties of Thin Polymerized Fullerene C_{60} Films Deposited via Electron-Beam Dispersion
 ○Ihar Razanau, Tetsu Mieno, Viktor Kazachenko
- 3P-28 Fabrication and Characterization of $C_{60}(\text{OH})_x$ Nanocrystals by a Reprecipitation Method
 Keisuke Baba, ○Hironori Ogata
- 3P-29 Structural characterization of fullerene-nanowhiskers by powder x-ray diffraction
 ○Hironori Ogata, Hideyuki Ohnami
- 3P-30 QM/MD Simulations of Dynamic Fullerene Self-Assembly in Carbon Vapor With Inert Carrier Gas
 ○Hu-Jun Qian, Ying Wang, Keiji Morokuma, Stephan Irl
- 3P-31 Synthesis of non-IPR fullerenes from C_{70} in Liquid Phase by Irradiation of Intense Femtosecond Laser Pulses
 ○Takeshi Kodama, Yuki Sato, Haruo Shiromaru, Joseph H. Sanderson, Tatsuya Fujino, Yoriko Wada, Tomonari Wakabayashi, Yohji Achibe
- 3P-32 Supramolecular Elementary Units in Porphyrin-Fullerene Composites Revealed by Solid-State NMR
 ○Hironobu Hayashi, Tomokazu Umeyama, Yoshihiro Matano, Hironori Kaji, Hiroshi Imahori
- 3P-33 The thermal [2+2] cycloaddition of morpholinocycloalkenes with [60]fullerene
 ○Tsubasa Mikie, Haruyasu Asahara, Kazuaki Nagao, Naohiko Ikuma, Ken Kokubo, Takumi Oshima
- 3P-34 Growth control of C_{60} fullerene nanowhiskers
 ○Yumeno Akasaka, Kun'ichi Miyazawa

Endohedral Nanotubes

- 3P-35 Effect of addition of Pt on Magnetic properties of iron-filled carbon nanotubes
 ○Yusuke Matsui, Tetsuya Kaneko, Atsushi Nagata, Hideki Sato, Yuji Fujiwara, Koichi Hata
- 3P-36 Water Structure inside Finite Length Single-Walled Carbon Nanotubes: SWCNT-Edge Effect
 ○Haruka Kyakuno, Kazuyuki Matsuda, Hitomi Yahiro, Yu Inami, Tomoko Fukuoka, Yasumitsu Miyata, Kazuhiro Yanagi, Yutaka Maniwa, Kazuyuki Takai, Toshiaki Enoki, Hiromichi Kataura, Takeshi Saito, Motoo Yumura, and Sumio Iijima
- 3P-37 Dynamics of water confined in zeolite templated carbon
 ○Kazuyuki Matsuda, Tomoko Fukuoka, Yasufumi Sato, Haruka Kyakuno, Kazuhiro Yanagi, Yutaka Maniwa, Hirotomo Nishihara, Takashi Kyotani

- 3P-38 Growth of Inner Nanotubes from Confined Ionic Liquid inside a Tip-closed SWNT
 ○Shimou Chen, Hong En Lim, Yasumitsu Miyata, Ryo Kitaura, Takeshi Saito, and Hisanori Shinohara
- 3P-39 Growth of Carbon Nanotubes Filled with Metal Compounds and “Tee-like” Carbon Nanotubes by Alcohol CVD
 ○Yusuke Furuyama, Takayuki Yamasaki, Akira Koshio, Fumio Koka
- 3P-40 Optical excited state induced by the interaction between rigid polymers and single-wall carbon nanotubes with large diameters
 ○Masayoshi Tange, Toshiya Okazaki, and Sumio Iijima
- 3P-41 Polyynes and Cyanopolyynes Included in a-Cyclodextrin Crystals
 ○Mao Saikawa, Tomonari Wakabayashi
- 3P-42 Optical Absorption Spectra of Single Wall Carbon Nanotubes Containing Hydrogen-End-Capped Polyynes Inside
 ○Masashi Teshiba, Yoriko Wada, Yosiki Yoshida, and Tomonari Wakabayashi
- 3P-43 Synthesis of One-Dimensional Coordination Polymer of
 ○Makiko Tomioka, Tomonari Wakabayashi and Yusaku Suenaga

Nanohorns

- 3P-44 Weak Pre-Oxidation of Graphene-Based Nanomaterials for Enhanced Structure Distinction by Thermogravimetric Analysis
 Maki Nakamura, Ryota Yuge, Sumio Iijima, Masako Yudasaka
- 3P-45 Interaction between carbon nanohorns and amino acids
 ○Xin Zhou, Minfang Zhang, Sumio Iijima, Masako Yudasaka

Candidates for the Young Scientist Poster Award

- 3P-46 In-situ Raman Spectroelectrochemical Investigation of Potential Dependent Electronic Structure of Single-Walled Carbon Nanotubes
 ○Shingo Sakamoto, Masato Tominaga
- 3P-47 Synthesis of metal-nanowire@SWNTs and their physical properties
 ○Daeheon Choi, Ryo Kitaura, Ryo Nakanishi, Yasumitsu Miyata, and Hisanori Shinohara
- 3P-48 Fabrication and Electrical Transport Properties of Atom Encapsulated Single-Walled Carbon Nanotubes Thin Film Transistors
 ○Yosuke Osanai, Toshiaki Kato, Rikizo Hatakeyama
- 3P-49 Separation of SWCNTs by gel chromatography using gradient of surfactant concentration
 ○Ryuji Inori, Takako Okada, Takayuki Arie, and Seiji Akitz
- 3P-50 Electrochromic Carbon Electrodes: Controllable Visible Color Changes
 ○Rieko Moriya, Kazuhiro Yanagi, Taishi Takenobu, Yasuhisa Naitoh, Hiromichi Kataura, Kazuyuki Matsuda, Yutaka Maniwa
- 3P-51 Biocompatibility of Chitosan/Carbon Materials Composite Membranes for Tissue Engineering
 ○Katsumune Takahashi, Koji Tsuchiya, Hirofumi Yajima
- 3P-52 Evaluation of Thermal Conductivity of Single Carbon Nanotube Using Fluorescent Gel Temperature Sensor in Liquid
 ○Kyohei Tomita, Hisataka Maruyama, Fumihito Ara
- 3P-53 Structural dependence of Multi-Walled Carbon Nanotubes on fuel cell performance
 ○Shinya Kitamura, Takeshi Hashishin, Jun Tamaki, Kazuo Kojima