

Tuesday, March 2nd

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)

1S-1 Recent Developments in Nanodiamond Research

○Eiji Osawa

General Lecture (9:30-10:30)

Properties of Nanotubes

- 1-1 Exciton Dynamics in Hole-Doped Single-Walled Carbon Nanotubes
○Kazunari Matsuda, Yuhei Miyauchi, Takero Sakashita, and Yoshihiko Kanemitsu
- 1-2 Photoluminescence Kinetics in PFO-Wrapped SWNT Papers
○Takeshi Koyama, Yasumitsu Miyata, Yuki Asada, Hisanori Shinohara, Hiromichi Kataura, Arao Nakamura
- 1-3 Environment Effects on Bundled Carbon Nanotubes Detected by Coherent Phonons
○Keiko Kato, Daisuke Takagi, Yoshihiro Kobayashi, Hiroki Hibino, Atsushi Ishizawa, Katsuya Oguri,
- 1-4 Short wavelength electroluminescence from single-walled carbon nanotubes with high bias voltage
○Hideyuki Maki, Satoru Suzuki, Norihito Hibino, Yoshihiro Kobayashi, Tetsuya Sato

Coffee Break (10:30-10:45)

General Lecture (10:45-11:45)

Properties of Nanotubes

- 1-5 Observation of Bound Tween80 Surfactant Molecules on Carbon Nanotubes in an Aqueous Solution using Pulsed Field Gradient Nuclear Magnetic Resonance Method
○Haruhisa Kato, Ayako Nakamura, Kohei Mizuno, Manabu Shimada, Kayori Takahashi, Sinichi Kinugasa
- 1-6 Surface-Enhanced Raman Scattering from an Isolated Single-Walled Carbon Nanotube at the Gap of Metal Nanodimer
○Satoshi Yasuda, Mai Takase, Keiichiro Komeda, Masanobu Nara, Kei Murakoshi
- 1-7 E11 and E22 Bandgap Modulation of Semiconducting Single-Walled Carbon Nanotube by Adsorbing Aluminium Clusters
○Yoshiteru Takagi, Susumu Okada
- 1-8 The fundamental importance of background analysis in precise characterization of single-wall carbon nanotubes by optical absorption spectroscopy
○Takeshi Saito, Shigekazu Ohmori, Masayoshi Tange, Bikau Shukla, Toshiya Okazaki, Motoo Yumura, Sumio Iijima

Lunch Time (11:45-13:00)

General Lecture (13:00-14:15)

Applications of Nanotubes

- 1-9 Site-selective deposition of single-wall carbon nanotube film using patterned self-assembled monolayer and its application to thin-film transistors
○Shunjiro Fujii, Takeshi Tanaka, Takeo Minari, Kazuhito Tsukagoshi, Hiromichi Kataura

- 1-10 Fabrication of high-performance thin film transistor with plasma CVD grown single-walled carbon nanotubes and elucidation of its working mechanism
○Shunsuke Kuroda, Toshiaki Kato, Toshiro Kaneko, Rikizo Hatakeyama
- 1-11 Incorporating of carbon nanotubes in donor-acceptor based heterojunction solar cells
○Golap Kalita, Koichi Wakita and Masayoshi Umeno
- 1-12 Bottom-up assembly of carbon nanotubes electrocatalyst for polymer electrolyte fuel cell
○Tsuyohiko Fujigaya, Kazuya Matsumoto, Naotoshi Nakashima
- 1-13 Morphology Change of Multi-Walled Carbon Nanotube Field Emitters Studied by In-Situ Transmission Electron Microscopy
○Toshinari Ichihashi, Fumishige Nakamura, Ryota Yuge, Mayumi Kosaka, Kiyohiko Toyama

Coffee Break (14:15-14:30)

Special Lecture (14:30-15:00)

- 1S-2 Biological Application of Fullerene Derivatives
○Tadahiko Mashino, Shigeo Nakamura

General Lecture (15:00-15:45)

Applications of Nanotubes

- 1-14 HRTEM observation of a crystalline-cluster phase inside ionic liquids freestanding on CNT super-thin films
○Shimou Chen, Keita Kobayashi, Ryo Kitaura, Yasumitsu Miyata, Kazu Suenaga, Hisanori Shinohara
- 1-15 Preparation of silica gel microparticles coated by pristine carbon nanotubes for the liquid chromatography stationary phase
○JongTae Yoo, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1-16 Surface Activated Bonding between Au layer and Vertically Aligned Multiwalled Carbon Nanotubes
○Masahisa Fujino, Tadatomo Suga, Ikuo Soga, Daiyu Kondo, Yoshikatsu Ishizuki, Taisuke Iwai, Masataka Mizukoshi

Poster Preview (15:45-16:25)

Poster Session (16:25-17:45)

Properties of Nanotubes

- 1P-1 Energetics and Electronic structure of Nitrogen-doped Carbon Nanotube
○Yoshitaka Fujimoto, Susumu Saito
- 1P-2 Thermal conduction property measurements of vertically-aligned single-walled carbon nanotube film by utilizing Raman spectrum
○Kei Ishikawa, Shohei Chiashi, Theerapol Thurakitserree, Takuma Hori, Rong Xiang, Makoto Watanabe,
- 1P-3 Deformation and charge transfer of the single-walled carbon nanotube adsorbed on the metallic
○Masayuki Hasegawa, Kazume Nishidate
- 1P-4 IR and Raman Stealth Effect for Molecules Absorbed on Single-Walled Carbon Nanotubes
○Yoshifumi Nishimura, Stephan Irle
- 1P-5 Effect of adsorption of benzene on field electron emission from a carbon nanotube
○Akkawat Ruammaitree, Hailong Hu, Hitoshi Nakahara, Yahachi Saito
- 1P-6 Theoretical Investigation on Single-Walled Carbon Nanotubes Functionalized by Bingel Reaction
○Eisuke Kawabata, Hiroyuki Fueno, Kazuyoshi Tanaka, Tomokazu Umeyama, Hiroshi Imahori

- 1P-7 Vibrational spectra and excited state calculation of polyynes@SWNTs
○Md. Mahbubul Haque, Riichiro Saito
- 1P-8 Simple dielectric constant function for the environment effects on the exciton energies of single-wall carbon nanotubes
○Ahmad R. T. Nugraha, Riichiro Saito, Kentaro Sato, Paulo T. Araujo, Ado Jorio
- 1P-9 What is the exciton effect in the Raman resonance window of semiconducting single wall carbon
○Jin Sung Park, Kentaro Sato, Riichiro Saito
- 1P-10 Control of colors of thin films of metallic and semiconducting single-wall carbon nanotube by electrochemical doping
○Rieko Moriya, Kazuhiro Yanagi, Takuya Suzuki, Yasuhisa Naitoh, Hiromichi Kataura, Kazuyuki Matsuda, Yutaka Maniwa
- 1P-11 Exciton environmental effects of resonance Raman and photoluminescence intensity of single wall carbon nanotubes
○Kentaro Sato, Riichiro Saito, Shigeo Maruyama
- 1P-12 Structure separation of single-walled carbon nanotubes by agarose gel
○Huaping Liu, Ye Feng, Takeshi Tanaka, Hiromich Kataura
- 1P-13 Graph-Theoretical Study of Finite Length Zigzag Carbon Nanotubes
○Noriyuki Mizoguchi
- 1P-14 Physical properties of boron-doped Carbon nanotube grown by Microwave Plasma CVD method
○Tohru Watanabe, Shunsuke Tsuda, Takahide Yamaguchi, Yoshihiko Takano
- 1P-15 Energetics and Electronic Structures of Twisted Carbon Nanotubes
○Koichiro Kato, Susumu Saito
- 1P-16 Effects of laser irradiation and heating on HiPco nanotubes probed by Raman spectroscopy
○Mari Hakamatsuka, Dongchul Kang, Kenichi Kojima, Masaru Tachibana

Applications of Nanotubes

- 1P-17 Stimuli responsive adsorption and desorption of small molecules on SWNTs surfaces in SWNT/polymer gel composite.
○Tatsuro Morimoto, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1P-18 Performance Enhancement of Organic Solar Cells with Polymer-SWCNT Composite Hole Transport Layer by Inserting Thin Cap Layer
○Naoki Kishi, Shinya Kato, Takeshi Saito, Daiki Ito, Yasuhiko Hayashi, Tetsuo Soga, Takashi Jimbo
- 1P-19 Mechanical Strength Improvement of PVA/CNT Composites by Sidewall Functionalization of CNT
○Masaru Sekido, Kouki Utsumi, Hiroyuki Ohmiya, Taihei Yamazaki, Susumu Kumagai, Hiroshi Kitamura, Hisato Takeuchi, Masatomi Ohno
- 1P-20 Development of microreactors consisting of vertically aligned carbon nanotube films
○Hiroshi Kinoshita, Akira Yamakawa, Nobuo Ohmae
- 1P-21 Production of hydrogen and fixation of carbon by thermal decomposition of ethanol
○Yosuke Kakimi, Hitoshi Nakahara, Koji Asaka, Yahachi Saito
- 1P-22 Scalable Fabrication of Co-, Ni-, and Pd-Nanoparticle-Containing CNTs on SPM Probe Apices
○Ian Thomas Clark, Masamichi Yoshimura

- 1P-23 Carbonization of polybenzimidazole-wrapped carbon nanotubes and their oxygen reduction activity
○Takeshi Uchinoumi, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1P-24 Electrical Properties of Carbon Nanotubes / Rubber Composites Prepared with Rotation / Revolution Mixing Technique
○Ayumu Sakai, Koji Tsuchiya, Takeo Furukawa and Hirofumi Yajima
- 1P-25 One-step Fabrication of Single-Walled Carbon Nanotubes Thin Film Transistor by Patterned Growth
○Shinya Aikawa, Rong Xiang, Erik Einarsson, Shohei Chiashi, Junichiro Shiomi, Eiichi Nishikawa, Shigeo Maruyama
- 1P-26 Microcontact Printing of Organic Molecules and Carbon Nanotubes
○Jan Mehlich, Bart Jan Ravoo, Hisanori Shinohara

Carbon nanoparticles

- 1P-27 Formation of Copper Nanowire-filled Carbon Nanotubes and Polyhedral Graphite Particles by Alcohol Arc Discharge
○Akira Koshio, Makoto Yamamoto, Kazuki Gion, Fumio Kokai
- 1P-28 Effect of high temperature annealing on the ferromagnetism of carbon nanofoam
○Hirohito Asano, Sumio Iijima, Shunji Bandow
- 1P-29 Electric Properties of Carbon Materials / Polymer Composites Prepared with Rotation / Revolution Kneading Technique
○Ryo Shiotani, Koji Tsuchiya, Takeo Furukawa, Hirofumi Yajima
- 1P-30 Formation of LaC₂ containing multi-shell carbon nanocapsules by rapid heat treatment of La fullerene soot synthesized at 20 Torr He
○Kazunori Yamamoto, Takeshi Akasaka

Candidates for the Young Scientist Poster Award

- 1P-31 Characterization of lengthsorted DNA-wrapped carbon nanotube thin film transistors
○Yuki Asada, Yasumitsu Miyata, Kazunari Shiozawa, Yutaka Ohno, Ryo Kitauara, Toshiki Sugai, Tkashi Mizutani, Hisanori Shinohara
- 1P-32 Diameter Tuning of Single-Walled Carbon Nanotubes through H₂ Reaction in Au-Catalyzed Plasma
○Zohreh Ghorannevis, Toshiaki Kato, Toshiro Kaneko, Rikizo Hatakeyama
- 1P-33 Solvent dependency for solubilization of single-walled carbon nanotubes using soluble
○Takahiro Fukumaru, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 1P-34 Structural Characterization of La@C₈₂Cp* Dimer
○Satoru Sato, Yutaka Maeda, Hidefumi Nikawa, Naomi Mizorogi, Takahiro Tsuchiya, Takeshi Akasaka, Zdenek Slanina, Shigeru Nagase
- 1P-35 DFTB/MD simulations of functionalized open-ended SWCNTs annealing under high-T
○Hironori Hara, Stephan Irlle
- 1P-36 Electrical Conductivity Improvement of Carbon Nanotube Wire
○Tomohiro Shimazu, Milan Siry, Kenji Okeyui, Hisayoshi Oshima
- 1P-37 In-situ transmission electron microscopy of structural change of the contact between gold and a carbon
○Motoyuki Karita, Koji Asaka, Yahachi Saito

- 1P-38 Isomerization of a Carbene Derivative of Metal Carbide Endofullerene $\text{Sc}_2\text{C}_2@\text{C}_{80}$
○Hiroki Kurihara, Yuko Yamazaki, Hidefumi Nikawa, Naomi Mizorogi, Takahiro Tsuchiya,
Shigeru Nagase, Takeshi Akasaka
- 1P-39 Linewidth of Raman G^+ -Band Features of Individual Single-Walled Carbon Nanotubes from
Isotopic Carbon Sources
○Pei Zhao, Rong Xiang, Kentaro Sato, Erik Einarsson, Shigeo Maruyama

Tuesday, March 3rd

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 Organic Synthesis of Endofullerenes Encapsulating a Small Molecule
○Yasujirou Murata

General Lecture (9:30-10:30)

Function and Applications of Fullerenes

- 2-1 Behavior of fullerenes as electron acceptor at the liquid-liquid interface
○Tsugumi Hayashi, Hideyuki Takahashi, Kazuyuki Tohji
- 2-2 IR and Raman Stealth Effect for Molecules Absorbed on Single-Walled Carbon Nanotubes
○Yoshifumi Nishimura, Stephan Inle
- 2-3 Ultraviolet photoelectron spectra of $C_{3v}\text{-M}_2@C_{82}$ and $C_{3v}\text{-(MC)}_2@C_{82}$ (M= Er, Lu, Tm)
○Takafumi Miyazaki, Yusuke Aoki, Youji Tokumoto, Ryohei Sumii, Haruya Okimoto, Hisashi Umemoto, Yasuhiro Ito, Noriko Izumi, Hisanori Shinohara, Shojun Hino
- 2-4 Isolation of Lithium Endohedral [60]fullerene
○Hiroshi Okada, Takeshi Sakai, Yoshihiro Ono, Kazuhiko Kawachi, Kenji Omote, Yasuhiko Kasama, Kuniyoshi Yokoo, Shoichi Ono, Shinobu Aoyagi, Eiji Nishibori, Hiroshi Sawa, Ryo Kitaura, Hisanori Shinohara, Shinsuke Ishikawa, Takashi Komuro, Hiromi Tobita

Coffee Break (10:30-10:45)

General Lecture (10:45-11:45)

Fullerene solids and Chemistry of Fullerenes

- 2-5 Photovoltaic Cell based on Photoinduced Charge Separation of Fullerene-Aluminum(III) Porphyrin Molecular Systems
○Osamu Ito, Atula D. S. Sandanayaka, Taku Hasobe, Prashanth K. Poddutoori, Art van der Est
- 2-6 Properties of Water-soluble Fluorous Vesicle Formed from Perfluoroalkylated Fullerene Amphiphile
○Tatsuya Homma, Koji Harano, Hiroyuki Isobe, Eiichi Nakamura
- 2-7 Electron transport property and ESR measurement of UV light irradiated fullerene nano whisker
○Tatsuya Doi, Kyouhei Koyama, Nobuyuki Aoki, Yuichi Ochiai
- 2-8 Electron-phonon couplings and superconductivity in fcc and A_{15} A_3C_{60}
○Takashi Koretsune, Susumu Saito

Lunch Time (11:45-13:00)

Awards Ceremony (13:00-13:45)

Special Lecture (13:45-14:15)

- 2S-4 Standardization on carbon nanotubes
○Haeseong Lee

General Lecture (14:15-15:15)

Nanowires

- 2-9 High-Yield Synthesis of Nitrogen Endohedral Fullerenes by Plasma Control
○Sunao Miyanaga, Toshiro Kaneko, Hirosasu Ishida, Rikizo Hatakeyama
- 2-10 The electronic structure of azafullerene encapsulated single-walled carbon nanotubes
○H. Yagi, Y. Tokumoto, M. Zenki, T. Zaima, T. Miyazaki, S. Hino, N. Tagmatarchis, Y. Iizumi,
- 2-11 Prevention of Crystal Growth of Tin and Lead in Confined Nanospace
○Keita Kobayashi, Kazu Suenaga, Takeshi Saito, Sumio Iijima
- 2-12 Metallic layered compound: Potassium-intercalated hexagonal boron nitride
○Susumu Okada, Minoru Otani

Coffee Break (15:15-15:30)

General Lecture (15:30-16:15)

Graphene and Carbon Nanoparticles

- 2-13 Highly-Efficient Field Emission from Carbon Nanotube-Nanohorn Hybrids Prepared by Chemical Vapor Deposition
○Ryota Yuge, Jin Miyawaki, Sadanori, Kuroshima, Toshinari Ichihashi, Tsutomu Yoshitake, Tetsuya Ohkawa, Yasushi Aoki, Sumio Iijima, Masako Yudasaka
- 2-14 Isotope Scrambling in the Formation of Polyynes Carbon Chains
○Tomonari Wakabayashi, Mao Saikawa, Yoriko Wada
- 2-15 Development of Ion Trap Ion Mobility Measurements
○Yoshihiko Sawanishi, Toshiki Sugai

Poster Preview (16:15-16:55)

Poster Session (16:55-18:15)

Function and Applications of Fullerenes

- 2P-1 Nickel-Atom Endohedral Fullerenes Synthesized by Irradiation of Nickel Ions Generated by Plasma
○Tatsuya Umakoshi, Hiroyasu Ishida, Toshiro Kaneko, and Rikizou Hatakeyama
- 2P-2 Nature of chemical bonding in endohedral di-metallofullerenes and their carbides:
 $M_2(C_2)@C_{2n}$ (M=Y, La, Er, Lu; $2n=82$ and 80)
○Jian Wang, Stephan Irle
- 2P-3 Purification and Characterization of $[Li@C_{60}]^+$ salts
○Takeshi Sakai, Hiroshi Okada, Yoshihiro Ono, Kazuhiko Kawachi, Kenji Omote, Yasuhiko Kasama, Kuniyoshi Yokoo, Shoichi Ono, Takashi Komuro, Hiromi Tobita
- 2P-4 Synthetic and Structural Studies on an Iridium Complex of the $Li@C_{60}$ Cation
○Takahito Watanabe, Takashi Komuro, Hiroshi Okada, Takeshi Sakai, Yoshihiro Ono, Yasuhiko Kasama, Hiromi Tobita
- 2P-5 Gd@C₈₂ derivatives based MRI contrast agents
○Jinying Zhang, Yasumitsu Miyata, and Hisanori Shinohara
- 2P-6 Exciton environmental effects of resonance Raman and photoluminescence intensity of single wall carbon nanotubes
○Kentarō Sato, Riichiro Saito, Shigeo Maruyama

- 2P-7 Encapsulation of metals by arc plasma reactor with twelve-phase alternating current discharge
○Tsugio Matsuura, Norio Maki
- 2P-8 Electronic Properties of Di-Scandium and Di-Scandium Carbide Endohedral Fullerenes
 $S_{62}(C_2)@C_{82}$: Comparison Between DFT and DFTB
○Yoshio Nishimoto, Stephan Irle
- 2P-9 Computed Structures and Relative Stabilities of $Dy_2@C_{100}$
○T. Yang, X. Zhao
- 2P-10 Direct observation of a Li cation inside C_{60} by the charge density analysis
○Shinobu Aoyagi, Eiji Nishibori, Ryo Kitaura, Hiroshi Okada, Takeshi Sakai, Yoshihiro Ono, Yasuhiko Kasama, Hiromi Tobita, Hisanori Shinohara, Hiroshi Sawa
- 2P-11 ReaxFF Simulation of Fullerene Formation in Benzene Combustions
○Hu-Jun Qian, Adri van Duin, Biswajit Saha, Keiji Morokuma, Stephan Irle
- 2P-12 Synthesis and Characterization of Benzene-bridged Fullerene Dimers
○Yasuhiro Ito, Jamie H. Warner, Maria del Carmen Gimenez-Lopez, Kyriakos Porfyrakis, Andrei N. Khlobystov, G. Andrew D. Briggs
- 2P-13 Polyhydroxylated Fullerene Salts
○Hiroshi Ueno, Toshiki Sugai, Hiroshi Moriyama
- 2P-14 Loading Pentapod Deca(organo)[60]fullerenes with Electron Donors: From Photophysics to Photoelectrochemical Bilayers
○Takahiko Ichiki, Yutaka Matsuo, Eiichi Nakamura
- 2P-15 Structure of Thin Polymerized C_{60} Coatings Formed by Electron-Beam Dispersion with Additional Electric Field Assistance
○Ihar Razanau, Tetsu Mieno, Viktor Kazachenko
- 2P-16 C_{60} Crystal Growth Directly between Electrodes on the Surface Treated Substrate
○Shota Kato, Kohei Kurihara, Yasunari Iio, Nobuyuki Iwata, Hiroshi Yamamoto
- 2P-17 Structure and electronic properties of Na-H- C_{60} compounds
○Hideyuki Ohnami, Hironori Ogata
- 2P-18 Structural change of Mg-doped C_{60} films along with growth temperature increasing
○Seiji Nishi, Masato Natori, Nobuaki Kojima, Masafumi Yamaguchi

Hybrid Carbon

- 2P-19 Hydrogen Etching Effect of CNW Prepared in Microwave Plasma Enhanced Chemical Vapor
○Seiya Suzuki, Yoshimura Masamichi
- 2P-20 Notices for single molecular imaging by HR-TEM
○Yoshiko Niimi, Masanori Koshino, Eiichi Nakamura, Kazutomo Suenaga
- 2P-21 Magnetic Properties of Rare Earth Metal Graphite Intercalation Compounds
○Satoshi Heguri, Mototada Kobayashi
- 2P-22 Comparison of combustion between catalyst-supported carbon nanocoil and graphitized carbon
○Takahiro Kawabata, Masashi Yokota, Kotaro Takimoto, Takashi Ikeda, Yoshiyuki Suda, Hirofumi Takikawa, Shinichiro Oke, Hitoshi Ue, Yoshito Umeda, Kazuki Shimizu
- 2P-23 Development of optical responsive carbon nanotubes cell cultured substrate
○Takao Sada, Tsuyohiko Fujigaya, Naotoshi Nakashima

Polyynes

- 2P-24 Synthesis of Polyynes from n-Hexane and n-Decane by Irradiation of Intense Femtosecond Laser Pulses
Yuki Sato, Takeshi Kodama, Haruo Shiromaru, Joseph H. Sanderson, Tatsuya Fujino, Yoriko Wada, Tomonari Wakabayashi, Yohji Achiba
- 2P-25 Optical Detection of N@C₆₀ upon Recycling HPLC
Airi Yoshikawa, Tomonari Wakabayashi
- 2P-26 Isotope Scrambling in the Formation of Cyanopolyynes
Mao Saikawa, Tomonari Wakabayashi
- 2P-27 A Model Structure for the Polyynes-Iodine Complex C₁₀H₂-I₆
Yoriko Wada, Yasunori Kai, Tatsuhisa Kato, Tomonari Wakabayashi
- 2P-28 Assembling Molecular Polyynes Chains in Single-Wall Carbon Nanotubes
Masashi Teshiba, Arisa Yoshimoto, Tomonari Wakabayashi
- 2P-29 Detection and lifetime measurements of C₄H- and C₆H- metastables
Jun Matsumoto, Motoshi Goto, Yu Zama, Takuya Majima, Hajime Tanuma, Toshiyuki Azuma, Haruo Shiromaru, Yohji Achiba

Nanohorns

- 2P-30 Magnetite-Loaded Carbon Nanohorns
Michiko Irie, Jin Miyawaki, Sumio Iijima and Masako Yudasaka
- 2P-31 In Vivo Study of SWNHs with Different Sizes on Biodistribution
Minfang Zhang, Takashi Yamaguchi, Sumio Iijima, Masako Yudasaka
- 2P-32 Biodistribution of Hole-Opened Carbon Nanohorns
Jin Miyawaki, Minfang zhang, Sumio Iijima and Masako Yudasaka

Candidates for the Young Scientist Poster Award

- 2P-33 Water-free, rapid growth of millimeter-tall single-walled carbon nanotube
Kei Hasegawa, Suguru Noda
- 2P-34 Crossover from weak localization to exponential localization in conduction of metallic and semiconducting single-wall carbon nanotube buckypaper
Hiroyuki Udoguchi, Kazuhiro Yanagi, Satoshi Sagitani, Yugo Oshima, Taishi Takenobu, Hiromichi Kataura, Kazuyuki Matsuda, Yutaka Maniwa
- 2P-35 Uniform single-layer graphene synthesis using flash-cooling CVD
Keiichi kamon, Yasumitsu Miyata, Ryo Kitaura, Hisanori Shinohara
- 2P-36 Thin film transistors using unbundled pure semiconducting single-wall carbon nanotubes
Kazunari Shiozawa, Yuki Asada, Yasumitsu Miyata, Ryo Kitaura, Yutaka Ohno, Takashi Mizutani, Hisanori Shinohara
- 2P-37 Exciton and free carrier electroluminescence from a SWNT observed through simultaneous measurements of electrical conductivity and emission spectra
Hiroyuki Wakahara, Hideyuki Maki, Tetsuya Sato, Satoru Suzuki

- 2P-38 Instant Implementation of CNT field emitter arrays by pulse current heating
○Kotaro Sekiguchi, Koji Furuichi, Yosuke Shiratori, Hisashi Sugime, Suguru Noda
- 2P-39 Biodegradation Assessment of Fullerene Nanowhiskers using Macrophage-like Cells
○Shin-ichi Nudjima, Kun'ichi Miyazawa, Junko Okuda-Shimazaki and Akiyoshi Taniguchi
- 2P-40 Preparation of Metallophthalocyanine loaded Multi-walled Carbon Nanotubes for Fuel Cell Cathode
○Tsutomu Yao, Takeshi Hashishin, Jun Tamaki
- 2P-41 Experimentally Determined Electronic States of Isolated (n,m) HiPco & CoMoCAT Single-Walled Carbon Nanotubes
○Yasuhiko Hirana, Yasuhiko Tanaka, Yasuro Niidome, Naotoshi Nakashima

Wednesday, March 4th

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)

- 3S-5 CNT Coated Conductive Fiber "CNTEC"- Development, Applications and Risk Assessment -
○Eiji Akiba

General Lecture (9:30-10:30)

Formation and Purification of Nanotubes

- 3-1 Early Stages in the Nucleation Process of Carbon Nanotubes: Density-Functional Tight-Binding Molecular
○Ying Wang, Yasuhito Ohta, HuJun Qian, Keiji Morokuma, Stephan Irlé
- 3-2 Gas-phase and On-surface Decomposition of Ethanol in Alcohol CCVD
○Rong Xiang, Bo Hou, Erik Einarsson, Junichiro Shiomi, Shigeo Maruyama
- 3-3 Millimeter-tall single-walled carbon nanotube forests grown from ethanol
○Hisashi Sugime, Suguru Noda
- 3-4 Chirality selective production of carbon nanotubes in HeN₂ mixed gas
○Akihito Inoue, Yasuhiro Tsuruoka, Takeshi Kodama, Toshiya Okazaki, Yohji Achiba

Coffee Break (10:30-10:45)

General Lecture (10:45-12:30)

Formation and Purification of Nanotubes

- 3-5 Horizontally Aligned SWNT Growth on R-cut Crystal Quartz
○Hiroto Okabe, Shohei Chiashi, Junichiro Shiomi, Tadashi Sato, Shouichi Kono, Masami Terasawa, Shigeo Maruyama
- 3-6 Interplay of Hydrophobic and Electrostatic Interactions between Dispersants and Single-walled Carbon Nanotubes in Water
Shin Katakura, ○Masahito Sano

Graphene

- 3-7 Restoration of π -bands on the graphene "buffer layer" on SiC(0001) by low temperature oxidation
○Satoshi Oida, Fenton R. McFeely, James B. Hannon, Rudolf M. Tromp, Zhihong Chen, Yanning Sun, Damon B. Farmer and John J. Yurkas
- 3-8 Magnetism in Graphene Nanoribbons on Ni(111)
○Keisuke Sawada, Fumiyuki Ishii, Mineo Saito
- 3-9 Phase control on Magnetic State of Graphite Thin Films by Electric Field
○Minoru Otani, Mikito Koshino, Yoshiteru Takagi, Susumu Okada
- 3-10 Magnetism of Curved-Graphene and its Guest adsorption systems
○Kazuyuki Takai, Tuyoshi Suzuki, Toshiaki Enoki, Hirotomo Nishihara, Takashi Kyotani
- 3-11 Electrode-Width Dependence of Transistor Properties of Graphene
○Ryo Nouchi, Tatsuya Saito, Katsumi Tanigaki

Lunch Time (12:30-13:45)

Special Lecture (13:45-14:15)

- 3S-6 A Brief Retrospective and Perspective of Graphene Research
○Hidefumi Hiura

Poster Preview (14:15-14:55)

Poster Session (14:55-16:15)

Endohedral Nanotubes

- 3P-1 Synthesis and Electrical Transport Properties of $C_{69}N$ Azafullerenes Encapsulated Single-Walled Carbon Nanotubes
○Yongfeng Li, Toshiro Kaneko, Rikizo Hatakeyama
- 3P-2 HR-TEM of KCl nano-crystals in single-walled carbon nanotubes
○Kaori Takai Hirose, Zheng Liu, Takeshi Saito, Kazu Suenaga
- 3P-3 Magnetic properties of carbon nanotubes filled with ferromagnetic metal
○Yusuke Matsui, Daijiro Hisada, Tetsuya Kaneko, Yuki Ichikawa, Hideki Sato, Yuji Fujiwara, Koichi Hata

Formation and Purification of Nanotubes

- 3P-4 A zigzag carbon nanotube: Growth and optical properties
○Yohji Achiba, Akihito Inoue, Yuuki Onishi, Takeshi Kodama, Toshiya Okazaki
- 3P-5 Mass-Production of Carbon Nanotubes by Semi-Continuous Fluidized-Bed
○Dong Young Kim, Hisashi Sugime, Kei Hasegawa, Toshio Osawa, Suguru Noda
- 3P-6 Diameter Control of SWNTs by Nano-diamond Catalyst
○Shohei Chiashi, Norihiro Hiramatsu, Daisuke Takagi, Yoshikazu Homma, Shigeo Maruyama
- 3P-7 SWNT Growth on $Al_2O_3/Co/Al_2O_3$ Multilayer Catalyst using Alcohol Gas Source Method in High Vacuum
○Yoshihiro Mizutani, Kuninori Sato, Takahiro Maruyama, Shigeo Naritsuka
- 3P-8 Change in Chirality Distribution of CoMoCAT Nanotubes Using Excimer Laser
○Masaki Hashimoto, Norio Maki, Masaaki Ashihara, Tsugio Matsuura
- 3P-9 Controllable yield of metallic single-walled carbon nanotubes by aerosol-assisted chemical vapor deposition
○Shinya Koike, Shunji Bandow, Yoshinori Ando
- 3P-10 Progress in the electrochemical cutting method of single-wall carbon nanotubes
○Shigekazu Ohmori, Takeshi Saito, Bikau Shukla, Motoo Yumura and Sumio Iijima
- 3P-11 Effect of Buffer Layers on the Synthesis of Carbon Nanotubes by Alcohol Catalytic Chemical Vapor Deposition
○Yuki Matsuoka, Masamichi Yoshimura
- 3P-12 Purification of mono-dispersed single-walled carbon nanotubes made with arc-burning technique in nitrogen atmosphere
○Takashi Mizusawa, Shinzo Suzuki, Toshiya Okazaki, Yohji Achiba
- 3P-13 Adsorption of a Water Molecule on Graphene: Accuracy of Density Functional Methods with Localized Orbitals
○Mari Ohfuchi
- 3P-14 SWNT Nucleation, Growth and Healing: Insights from Density-Functional Tight-Binding Molecular Dynamics Simulations
○Alister J. Page, Stephan Irle, Keiji Morokuma

- 3P-15 CVD Fabrication of Thin Carbon Nanocoil with Sn/Fe Catalyst on Mesoporous Particles
○Kotaro Takimoto, Masashi Yokota, Lim Siew Ling, Yoshiyuki Suda, Hirofumi Takikawa, Hitoshi Ue, Kazuki Shimizu, Yoshito Umeda
- 3P-16 High-purity semiconducting single-wall carbon nanotubes separation by density gradient ultracentrifugation
○Ye Feng, Yasumitsu Miyata, Shunjiro Fujii, Kiyoto Matsuishi, Hiromichi Kataura
- 3P-17 Catalysts and supports for rapid growth of vertically-aligned CNTs
○Keisuke Nomura, Kei Hasegawa, Suguru Noda
- 3P-18 Gas-phase synthesis of SWCNTs using ferrocene and C₂H₂/CH₄ feedstocks
○Youkou Ishitsuka, Yoshikuni Sato, Toshio Osawa, Suguru Noda
- 3P-19 Experimental and numerical study on the effect of carbon feedstock decomposition on CVD synthesis of single-walled carbon nanotubes
○Bo Hou, Rong Xiang, Erik Einarsson, Junichiro shiomi, Akira Miyoshi, Shigeo Maruyama
- 3P-20 Raman Analysis with Multi Excitation Laser of Single-Walled Carbon Nanotubes Grown with Free Electron Laser Irradiation during Growth
○Kejiro Sakai, Daisuke Ishiduka, Takuya Somonura, Hiroki Takeshita, Kunihide Kaneki, Hirofumi Yajima, Nobuyuki Iwata, Hiroshi Yamamoto
- 3P-21 Synthesis of Carbon Nanotubes by a “Submarine”-style Substrate Heating Method
○Hiroyuki Yokoi, Hiroshi Momota, Tomohiro Iwamoto
- 3P-22 Effect of Catalyst Oxidation on Carbon Nanotube Growth by Low Pressure Chemical Vapor Deposition
○Tomoyuki Minami, Daiki Sawaguchi, Hideki Sato, Koichi Hata
- 3P-23 Influence of catalyst reduction conditions on single-walled carbon nanotube diameter
○Theerapol Thurakitserree, Erik Einarsson, Rong Xiang, Shohei Chiashi, Junichiro Shiomi, Shigeo Maruyama
- 3P-24 Low-temperature preparation of Carbon Nanotubes by Plasma Enhanced Chemical Vapor Deposition
○Masato Miyake, Toru Iijima, Kenneth Teo, Nalin Rupesinghe, Kazunori Horikawa, Kenjiro Onuma,
- 3P-25 Screening of Surfactants for Metallic/semiconducting Separation of Single-Wall Carbon Nanotubes Using Agarose Gel
○Takeshi Tanaka, Yasuko Urabe, Hiromichi Kataura
- 3P-26 CVD Growth of Vertically Aligned SWNT Films Using Dimethyl Ether as the Carbon Source
○Taiki Inoue, Hiroto Okabe, Bo Hou, Shohei Chiashi, Makoto Watanabe, Junichiro Shiomi, Shigeo Maruyama
- 3P-27 Preparation of single wall carbon nanotubes by CO₂ laser ablation method at room temperature
○Takashi Yamaguchi, Ryo Nakanishi, Ryo Kitaura, Shunji Bandow, Masako Yudasaka, Hisanori Shinohara, Sumio Iijima

Graphene

- 3P-28 Carbon Spiral Helix, a Novel Nanoarchitecture Derived from Monovacancy Defects in Graphene
○Lili Liu, Xingfa Gao, Shigeru Nagase, Stephan Irle
- 3P-29 DFT investigation of stability of adatom adsorption on graphene
○Kengo Nakada, Akira Ishii
- 3P-30 Preparation and Evaluation of Graphene by Cleavage Method
○Keiichirou Matsuyama, Tepei Maeda, Nobuyuki Iwata, Hiroshi Yamamoto
- 3P-31 Raman spectroscopy of few-layer graphene grown on graphene flakes
○Ryota Negishi, Hiroki Hirano, Yoshihiro Kobayashi, Yasuhide Ohno, Kenzo Maehashi, Kazuhiko Matsumoto

Candidates for the Young Scientist Poster Award

- 3P-32 Photomodification of Fullerene Bilayer Vesicles and Control of their Membrane Permeability to Water
○Akimitsu Narita, Koji Harano, Eiichi Nakamura
- 3P-33 Fabrication of transparent conductive films using carbon nanotubes encapsulating metal-nanowires
○Daeheon Choi, Ryo Kitaura, Yasumitsu Miyata, Hisanori Shinohara
- 3P-34 Growth control of Multi-Walled Carbon Nanotubes for fuel cell
○Shinya Kitamura, Rika Yamamoto, Takeshi Hashishin, Jun Tamaki
- 3P-35 Synthesis of Highly Electron Accepting [60]Fullerene Bisadduct
○Riyah S. Arastoo, Ken Kokubo, Hao Geng, Hsing-Lin Wang, Takumi Oshima, Long Y. Chiang
- 3P-36 Electronic transport properties of doped nanotube heterostructure
○Masahiro Sakurai, Susumu Saito
- 3P-37 Facile Synthesis of Water-Insoluble Lowly Hydroxylated Fullerenol and its Nanoparticle Property
○Naoki Kobayashi, Ken Kokubo, Takumi Oshima
- 3P-38 Highly Localized Photoelectrochemical Reaction of an Isolated Single-Walled Carbon Nanotube at Metal Nanogap
○Mai Takase, Hideki Nabika, Satoshi Yasuda, Kei Murakoshi
- 3P-39 Preparation of TiO₂-filled MWNTs
○Hidehiro Ikenoko, Takeshi Hashishin, Jun Tamaki
- 3P-40 Stark effect of SWNT photoluminescence induced by external electric field
○Yuji Kawai, Hideyuki Maki, Tetsuya Sato