Poster Presentation

Poster session 1(online): July 29th 17:15-18:45

Poster session 2 (in person): July 30th 17:10-18:40 odd poster numbers 17:10-17:55 even number 17:55-18:40

PO29-1 Development of computational chemistry method for near-field infrared absorption spectroscopy

<u>Teppei Zengyo</u>¹, Masato Takenaka^{1,} Tetsuya Taketsugu¹, and Takeshi Iwasa^{1,2} 1)Hokkaido University, Japan, 2) JST-PRESTO, Japan

- PO29-2 Spatiotemporal carrier dynamics in semiconductors with energy bands split by Rashba effect <u>Takashi Kogo¹</u>, Kiyoshi Kobayashi^{1,2}, and Akira Ishikawa¹ 1) University of Yamanashi, Japan, 2) Toyo University, Japan
- PO29-3 Plasmonic vortices coupling on a metal film with two adjacent Archimedes' spiral slits excited by electron beams

Yung-Chiang Lan, Jiun Yu Wang, and Chih-Min Chen Department of Photonics, National Cheng Kung University, Taiwan

PO29-4 Optical trapping of polystyrene nanospheres on nanostructured titanium surfaces fabricated by an acid etching process

Masashi Yoshida¹ and Tatsuya Shoji^{2*} 1) Graduate School of Science, Kanagawa University, Japan, 2) Faculty of Science, Kanagawa University, Japan

PO29-5Giant chiroptical response of simple twisted metal nanorods due to strong plasmon coupling
Yoshito Y. Tanaka, Anan Wu, and Tsutomu Shimura
Institute of Industrial Science, The University of Tokyo, Japan

PO29-6 Dynamic color selectivity by hybridization plasmon mode of highly-assembled Ag nanocube monolayer

Ayana Mizuno^{1, 2} and Atsushi Ono¹ 1) Graduate School of Science and Technology, Shizuoka University, Japan, 2) Research Fellow of Japan Society for the Promotion of Science (JSPS), Japan

PO29-7 Fabrication of plasmonic optical fiber using silane coupling agents for optical manipulation <u>Yuki Asase</u>¹ and Tatsuya Shoji^{2*} 1) Graduate School of Science, Kanagawa University, Japan, 2) Faculty of Science, Kanagawa University, Japan

PO29-8 How to fabricate sequential pattern by a single deposition?

Yuki Watanabe¹, Toshihiro Okamoto^{2,3}, Masanobu Haraguchi^{2,3,} and Kenzo Yamaguchi^{2,3*} 1) Graduate School of Sciences and Technology for Innovation, Tokushima University, Japan, 2) Institute of Post-LED Photonics, Tokushima University, Japan, 3) Industrial and Social Sciences, Tokushima University, Japan

PO29-9 Surface-enhanced Raman scattering under modal ultrastrong coupling conditions

<u>Yoshiki Suganami</u>¹, Tomoya Oshikiri², Hideyuki Mitomo¹, Xu Shi³, Yasutaka Matsuo¹, Kuniharu Ijiro1, Hiroaki Misawa^{1,4}

1)Research Institute for Electronic Science, Hokkaido University, Japan, 2) Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan, 3) Creative Research Institution, Hokkaido University Japan, 4) Center for Emergent Functional Matter Science, National Yang Ming Chiao Tung University, Taiwan

PO29-10 Photoluminescence properties of Au-nanostructure loaded transition metal dichalcogenide

<u>Hiyori Sakamoto¹</u>, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno² 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-11 Spatially selective arrangement of fluorophores in the nanogap of Au dimer and their spectral properties

Hiroyuki Kato¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno² 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Department of Chemistry, Faculty of Science, Hokkaido University, Japan

PO29-12 Effect of chemically induced permittivity changes on the plasmonic properties of metal nanomaterials

Sou Ryuzaki¹, Yuta Tsuji², Koichi Okamoto³, and Kaoru Tamada²

1) Faculty of Science, Hokkaido University, Japan, 2) Institute for Materials Chemistry and Engineering, Kyushu University, Japan, 3) Department of Physics and Electronics, Osaka Metropolitan University, Japan

PO29-13 Near-field enhancement effects induced on the plasmon-photonic crystal coupling systems

<u>Rin Miyazaki</u>¹, Yuto Shikama¹, Hiroki Takeuchi¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno²

1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-14 Near-field spectral properties of exciton-plasmon strong coupling systems <u>Hiroki Takeuchi¹</u>, Aya Takahashi¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno² 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-15 Fabrication and SERS properties of electrochemical deposited silver nanostructure

<u>Toya Otsuki</u>, Tsuyoshi Akiyama, and Takeo Oku The University of Shiga Prefecture

PO29-16 Plasmon-induced photochromic reactions under weak and strong coupling conditions

<u>Yuma Fukumoto</u>¹, Yinhao Xu¹, Wakana Toyooka², Yu Sun², Keisuke Imaeda³, Sou Ryuzaki³, and Kosei Ueno³

1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) School of Science, Hokkaido University, Japan, 3) Faculty of Science, Hokkaido University, Japan

PO29-17 Nonlinear spectroscopy of coupled plasmonic nanostructures

<u>Aya Takahashi</u>¹, Hiyori Sakamoto¹, Hiroki Takeuchi¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno²

1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-18 Control of near-field enhancement effect induced on the periodically arrayed plasmonic nanostructures

Keisuke Imaeda¹, Junfeng Yue², Hiroki Takeuchi², and Kosei Ueno¹ 1) Faculty of Science, Hokkaido University, Japan, 2) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan

PO29-19 Fabrication and spectral properties of graphene plasmonic nanostructures in the mid-infrared region

<u>Naoya Nomoto¹</u>, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno² 1) School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-20 Fabrication of plasmon-functionalized microreactor systems

<u>Sora Inoue</u>¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno² 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-21 Development of live cell imaging system using surface plasmon resonance of gold nanodisk structures

<u>N. Osaka</u>¹, M. Ozawa¹, T. Matsuyama¹, K. Wada¹, K. Okamoto¹, A. Kawakita², K. Murata², and K. Sugimoto²

1) Engineering, Osaka Metropolitan University, Japan, 2) Life and Environmental Sciences, Osaka Metropolitan University, Japan

PO29-22 Fabrication and spectral properties of Au nanoparticles-loaded transition metal dichalcogenide compounds

Kota Kurosawa¹, Yu Sun², Keisuke Imaeda², Sou Ryuzaki², and Kosei Ueno²

1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-23 Optical field enhancement near gold nanoplate assembly studied by nonlinear optical microscopy

<u>Nagisa Miwa</u> and Kohei Imura School of Advanced Science and Engineering, Waseda University, Japan PO29-24 Formation of ultra-strong coupling states between dye molecules and plasmonic lattice arrays Nozomi Oishi¹, Takahiro Hayashi¹, Shupei Oikawa¹, Hiro Minamimoto², and Kei Murakoshi² 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) Faculty of Science, Hokkaido University, Japan

PO29-25 Enhancement of hot electron transfer by coherent interaction between plasmonic nanoparticles under modal strong coupling conditions

Yen-En Liu¹, Xu Shi², Tomoya Oshikiri¹, Yuji Sunaba¹, Keiji Sasaki¹, and Hiroaki Misawa^{1,3} 1) Research Institute for Electronic Science, Hokkaido University, Japan, 2) Creative Research Institution, Hokkaido University, Japan, 3) Center for Emergent Functional Matter Science, National Yang Ming Chiao Tung University, Taiwan

PO29-26 Orientation control of gold nanoring using surface modification

<u>Tomoki Watanabe</u>¹, Toshihiro Okamoto^{2,3}, Kenzo Yamaguchi^{2,3}, Masanobu Haraguchi^{2,3} 1) Graduate School of Sciences and Technology for Innovation, Tokushima University, Japan, 2) Institute of Post-LED photonics, Tokushima University, Japan, 3) Industrial and Social Sciences, Tokushima University, Japan

PO29-27 Scanning near-field optical spectroscopy and carrier transport based analysis in mesoscopic regions for two-dimensional semiconductors

<u>A.Sakurai</u>^{1**}, K. Iwamoto¹, Y. Miwa¹, H. Hori¹, A. Ishikawa¹, K. Uchiyama¹, K. Kobayashi², K. Kishino³ and M. Sakai^{1*}

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PO29-28Local condensation of chain polymers labeled with perylene using NASSCA optical tweezersHazuki Kusano¹, Ryota Takao¹, Ken-ichi Yuyama¹, Tatsuya Shoji², and Yasuyuki Tsuboi¹1) Graduate School of Science, Osaka Metropolitan University, Japan, 2) Graduate School of Science, Kanagawa University, Japan

PO29-29 Optical trapping and patterning of protein amyloids <u>Mai Miyazaki</u>, Ken-ichi Yuyama, and Yasuyuki Tsuboi Graduate School of Science, Osaka Metropolitan University, Japan

PO29-30 Molecular manipulation at plasmonic fields under electrochemical potential control
 <u>Hiro Minamimoto^{1,2}</u>, Nobuaki Oyamada¹, Kei Murakoshi¹
 1) Faculty of Science, Hokkaido University, Japan, 2) Graduate School of Engineering, Kobe University, Japan

PO29-31 Generation of anisotropic nanoparticles from azobenzene ultrathin film irradiated by locally polarized optical near-fields

Shumpei Koide¹, Yuta Nakai¹, Kazunari Shinbo¹, Hisaki Oka², and Yasuo Ohdaira¹ 1) Graduate School of Science and Technology, Niigata University, Japan, 2) Department of Physics, Kitasato University, Japan

- PO29-32Investigation of exciton dynamics in heterostructure of monolayer WS2 and Ti2N MXene
quantum dots by near-field photoluminescence imaging
Anir S. Sharbirin, Youngbum Kim, Rebekah E. Kong, Wendy B. Mato, and Jeongyong Kim*
Department of energy Science, Sungkyunkwan University, Republic of Korea
- PO29-33Near-Field Imaging and spectroscopy of twisted WSe2/WSe2 homo BilayerYoungbum Kim, K. P. Dhakal, Anir S. Sharbirin, Trang Thu Tran and Jeongyong Kim*
Department of Energy Science, Sungkyunkwan University, Republic of Korea
- PO29-34 Optical characterization of the structural defects in two-dimensional perovskite films using nearfield scanning optical imaging

<u>Trang Thu Tran</u>, Youngbum Kim, Anir S. Sharbirin, and Jeongyong Kim* Department of Energy Science, Sungkyunkwan University, Republic of Korea

PO29-35 Coherent phonon measurements on plasmon-molecule coupling systems Yuto Shikama¹, Shimba Ushikoshi², Yusuke Takahashi¹, Yu Sun³, Keisuke Imaeda³, Sou Ryuzaki³, and Kosei Ueno³ 1) Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan, 2) School of

Science, Hokkaido University, Japan, 3) Faculty of Science, Hokkaido University, Japan

PO29-36 Investigation of the direction of rotation of WGM oscillation in hexagonal GaN microdisk <u>Yuka Iwamoto¹</u>, Ken Kamiishi¹, Atsushi Syouji¹, Tetsuya Kouno², Akihiko Kikuchi³, Katsumi Kishino³, and Masaru Sakai1*

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