

## Poster Presentation (P25-001-146)

Tuesday, July 25, 2023 17:10 - 19:40

17:10-18:25 Odd-Numbered Presentation Time

18:25-19:40 Even-Numbered Presentation Time

**[P25-001]** Spatial Control of Polymorphic Phase Transition from  $\beta$ -Form of Glycine Crystals by Focused Irradiation with a Femtosecond Laser Pulse

\*Hozumi Takahashi<sup>1</sup>, Yudai Yoshimura<sup>1</sup>, Ryota Murai<sup>2</sup>, Ryuzo Kawamura<sup>3</sup>, Mihoko Maruyama<sup>1,4</sup>, Masashi Yoshimura<sup>5</sup>, Yusuke Mori<sup>1</sup>, Hiroshi Y Yoshikawa<sup>1</sup> (1. Graduate School of Engineering, Osaka Univ. (Japan), 2. SOSHO CHOKO Incorporated (Japan), 3. Graduate School of Science and Engineering, Saitama Univ. (Japan), 4. Graduate School of Life and Environmental Science, Kyoto Prefectural Univ. (Japan), 5. Institute of Laser Engineering (ILE), Osaka Univ. (Japan))

**[P25-002]** Photophysical Studies of Platinum-coordinated Flexible Lewis Pairs

\*Ka-Ming Tong<sup>1</sup>, Michael O Wolf<sup>1</sup> (1. Univ. of British Columbia (Canada))

**[P25-003]** Efficient Triplet-Triplet Annihilation Upconversion in the Solid State

\*Lingling Wei<sup>1</sup> (1. College of chemistry, Sichuan Univ. (China))

**[P25-004]** Nucleofugality Modulation of Selenium-Leaving Groups through Non-Covalent Interactions

\*Anna Franziska Tiefel<sup>1</sup>, Daniel Grenda<sup>2</sup>, Carina Allacher<sup>2</sup>, Elias Harrer<sup>1</sup>, Julia Rehbein<sup>1</sup>, Patrick Nuernberger<sup>2</sup>, Alexander Breder<sup>1</sup> (1. Univ. of Regensburg, Institute for Organic Chemistry (Germany), 2. Univ. of Regensburg, Institute for Physical and Theoretical Chemistry (Germany))

**[P25-005]** Complexation of Chiral Amines by a Novel Pillar[5]Arene to Achieve Solvent-Dependent Chiral Inversion

\*Chunhong Liu<sup>1</sup> (1. College of chemistry, Sichuan Univ. (China))

**[P25-006]** Perturbations of S<sub>1</sub> Phenomena in Organoelement Compounds

\*David Dunlop<sup>1,2</sup>, Tomáš Slanina<sup>1</sup> (1. Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences, (Czech Republic), 2. Department of Inorganic Chemistry, Faculty of Science, Charles Univ. (Czech Republic))

**[P25-007]** Development of Stable Photocontrolled Charge Manipulation System

\*Anna Vasilevska<sup>1,2</sup>, Tomas Slanina<sup>1</sup> (1. IOCB Prague (Czech Republic), 2. Charles Univ. (Czech Republic))

**[P25-008]** Cyclometallated Iron (Iii) Complexes with Chromophore Backbones as Molecular Photosensitisers

\*Lennart Schmitz<sup>1</sup>, Jakob Steube<sup>1</sup>, Matthias Bauer<sup>1</sup>, Miguel A. Cordero<sup>2</sup>, Olga Bokareva<sup>2</sup>, Roland Schoch<sup>1</sup>, Adam Neuba<sup>1</sup> (1. Univ. of Paderborn (Germany), 2. Univ. of Rostock (Germany))

**[P25-009]** Amine Donors Quenching Luminescence Properties of Bis-Nhc-Pyridine-Ru(II) Complexes

\*Lorena Fritsch<sup>1</sup>, Matthias Bauer<sup>1</sup> (1. Paderborn Univ. (Germany))

**[P25-010]** Precisely Controlled Three-State Photoswitches Based on Fulgimides

\*Jakub Copko<sup>1</sup>, Tomáš Slanina<sup>1</sup> (1. Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences (Czech Republic))

**[P25-011]** Enhanced Near-infrared Emission and Excited State Dynamics in Silver Nanoclusters

\*Wataru Ishii<sup>1</sup>, Yoshinori Okayasu<sup>2</sup>, Yoichi Kobayashi<sup>2</sup>, Takuya Nakashima<sup>1</sup> (1. Osaka Metropolitan Univ. (Japan), 2. Ritsumeikan Univ. (Japan))

**[P25-012]** The Photophysical Properties of Flavins Tuned by Attaching an Aryl Moiety via Direct C=C Bond Coupling

\*Naisargi Sharadkumar Varma<sup>1</sup>, Radek Cibulka<sup>2</sup>, Marek Sikorski<sup>1</sup> (1. Adam Mickiewicz Univ. (Poland), 2. Univ. of Chemistry and Technology, Prague (Czech Republic))

**[P25-013]** Generation and Temperature-Controlled Release of Singlet Oxygen by Bichromophores Complexes

\*Natalia Dutkiewicz<sup>1</sup>, Przemysław Gawel<sup>2</sup>, Maciej Majdecki<sup>2</sup>, Barbara Golec<sup>3</sup>, Aleksander Gorski<sup>1</sup> (1. Institute of Physical Chemistry Polish Academy of Sciences (Poland), 2. Institute of Organic Chemistry Polish Academy of Sciences (Poland), 3. Faculty of Mathematics and Science, Cardinal Stefan Wyszyński Univ. (Poland))

**[P25-014]** Optical Trapping-Controlled Co-crystallization in Two-Component Solution

\*Wen-Chi Wang<sup>1</sup>, Kazuki Okano<sup>2</sup>, Hiroshi Yoshikawa<sup>3</sup>, Teruki Sugiyama<sup>1,4</sup> (1. National Yang Ming Chiao Tung Univ. (Taiwan), 2. Saitama Univ. (Japan), 3. Osaka Univ. (Japan), 4. Nara Institute of Science and Technology (Japan))

**[P25-015]** Optical Trapping-Induced Enantioselectivity Switch in Chiral Crystallization of NaClO<sub>3</sub> Using Gold Nanoparticles

\*Hao-Tse Su<sup>1</sup>, Hiromasa Niinomi<sup>2</sup>, An-Chieh Cheng<sup>3</sup>, Christophe Pin<sup>3</sup>, Yoshito Tanaka<sup>4</sup>, Keiji Sasaki<sup>3</sup>, Teruki Sugiyama<sup>1</sup> (1. National Yang Ming Chiao Tung Univ. (Taiwan), 2. Tohoku Univ. (Japan), 3. Hokkaido Univ. (Japan), 4. The Univ. of Tokyo (Japan))

**[P25-016]** Photochromic Diarylethenes Undergoing 6 $\pi$  Azaelectrocyclic Reaction

\*Shota Hamatani<sup>1</sup>, Daichi Kitagawa<sup>1</sup>, Seiya Kobatake<sup>1</sup> (1. Osaka Metropolitan Univ. (Japan))

**[P25-017]** Reversible Process Involving 2-Isocyanothiol Radical and Iodine-mediated Radical Cyclization in Argon Matrices

\*Anjali Mahadevan<sup>1</sup>, Piyush Kumar<sup>1</sup>, Sapna Singh<sup>1</sup>, Sugumar Venkataramani<sup>1</sup> (1. Indian Institute of Science Education and Research, Mohali (India))

**[P25-018]** Photoswitchable Rhodamine-Based Multi-analyte Responsive Chemosensors

\*Sapna Singh<sup>1</sup>, Anjali Srivastava<sup>1</sup>, Surbhi Grewal<sup>1</sup>, Rajani Rajani<sup>1</sup>, Sugumar Venkataramani<sup>1</sup> (1. Indian Institute of Science Education and Research Mohali (India))

**[P25-019]** Time-Resolved EPR Study on Conformational Changes in Triplet-Triplet Dissociation and Annihilation after Intramolecular Singlet Fission

\*Ryota Kusumoto<sup>1</sup>, Shunta Nakamura<sup>2</sup>, Masaaki Fuki<sup>1,3</sup>, Taku Hasobe<sup>2</sup>, Yasuhiro Kobori<sup>1,3</sup> (1. Dept. Chem., Grad. Sch. Sci., Kobe Univ. (Japan), 2. Dept. Chem., Grad. Sch. Sci. Tech., Keio Univ. (Japan), 3. Mol. Photosci. Res. Center, Kobe Univ. (Japan))

**[P25-020]** Analysis of the Mechanism of the Photoreaction of Phenothiazine Derivatives

\*Yuki Ishii<sup>1</sup>, Masaki Saigo<sup>1</sup>, Tomohiro Ryu<sup>1</sup>, Kiyoshi Miyata<sup>1</sup>, Youichi Tsuchiya<sup>2</sup>, Chihaya Adachi<sup>2</sup>, Ken Onda<sup>1</sup> (1. Kyushu Univ. (Japan), 2. OPERA, Kyushu Univ. (Japan))

**[P25-021]** Optically Evolved Assembly of Gold Nanoparticles and Its Motion Correlated Scattering Spectra

\*Chih-Hao Huang<sup>1</sup>, Hiroshi Masuhara<sup>1</sup> (1. National Yang Ming Chiao Tung Univ. (Taiwan))

**[P25-022]** Mechanistic Study on the Solid-State Chemiluminescence of Anthracene Endoperoxides with Extended  $\pi$ -Conjugated Substituents

\*Norihisa Yamasaki<sup>1</sup>, Chihiro Matsushashi<sup>1</sup>, Shojiro Maki<sup>1</sup>, Takashi Hirano<sup>1</sup> (1. The Univ. of Electro-Comm. (Japan))

**[P25-023]** Photoinduced Triplet Depletion Allowing Higher-Resolution Afterglow

\*Kikuya Hayashi<sup>1</sup>, Keiki Fukumoto<sup>2</sup>, Shuzo Hirata<sup>1</sup> (1. Department of Engineering Science, The Univ. of Electro-Commun. (Japan), 2. High Energy Accelerator Research Organization (KEK) (Japan))

**[P25-024]** Extended Conjugation of a Phosphorus Substituent Contributing to Enhanced Room-Temperature Phosphorescence

\*Rana Tsuru<sup>1</sup>, Bahadur Sk<sup>1</sup>, Shuzo Hirata<sup>1</sup> (1. Department of Engineering Science, The Univ. of Electro-Communications (Japan))

**[P25-025]** Charge-Transfer State and State Mixing in Tetracyanoquinodimethane Probed by Electroabsorption Spectroscopy

\*Ahatashamul Islam<sup>1</sup>, Kensuke Syundo<sup>1</sup>, Toshifumi Iimori<sup>1</sup> (1. Muroran Institute of Technology (Japan))

**[P25-026]** Cancelled

**[P25-027]** Ultrafast Photophysics of Ruthenium N-heterocyclic Carbenes Complex

\*Yen Hoang Hai Tran<sup>1</sup>, Samuel Persson<sup>2</sup>, Kenneth Wärnmark<sup>2</sup>, Pavel Chábera<sup>1</sup>, Petter Persson<sup>3</sup>, Arkady Yartsev<sup>1</sup> (1. Division of Chemical Physics, Department of Chemistry, Lund Univ. (Sweden), 2. Center for Analysis and Synthesis, Department of Chemistry, Lund Univ. (Sweden), 3. Theoretical Chemistry Division, Chemistry Department, Lund Univ. (Sweden))

**[P25-028]** Chiral binaphthalimide Scaffolds with Thermally Activated Delayed Fluorescence Based on Davydov Splitting

\*Yugo Tsuji<sup>1</sup>, Natsuko Kanno<sup>2</sup>, Chigusa Goto<sup>1</sup>, Katsuyuki Sizu<sup>2</sup>, Hironori Kajii<sup>2</sup>, Tsuyoshi Kawai<sup>1</sup>, Marine Louis<sup>1</sup> (1. Nara Institute of Science and Technology (Japan), 2. Kyoto Univ. (Japan))

**[P25-029]** Combined Supramolecular and Soft-Lithographic Approach to Expanding Circularly Polarized Luminescence Performances

\*Gyurim Park<sup>1</sup>, Dong Yeun Jeong<sup>2</sup>, Seung Yeon Yu<sup>2</sup>, Jong Jin Park<sup>3</sup>, Jong Hyun Kim<sup>3</sup>, Hoichang Yang<sup>4</sup>, Youngmin You<sup>1</sup> (1. Yonsei Univ. (Korea), 2. Ewha Womans Univ. (Korea), 3. Ajou Univ. (Korea), 4. Inha Univ. (Korea))

**[P25-030]** Luminescence Switching of CdSe QDs by Diarylethene Derivative and the Analysis Based on Stochastic Model

\*Moe Yamamoto<sup>1</sup>, Masakazu Morimoto<sup>2</sup>, Eguchi Daichi<sup>1</sup>, Masahiro Irie<sup>2</sup>, Naoto Tamai<sup>1</sup> (1. Kwansai Gakuin Univ. (Japan), 2. Rikkyo Univ. (Japan))

**[P25-031]** Synthesis and Elementary Exciton Dynamics of ZnSe-based Nanoplatelets

\*Junseo Lee<sup>1</sup>, Tamai Naoto<sup>1</sup>, Eguchi Daichi<sup>1</sup>, Wang Li<sup>1</sup> (1. Kwansai Gakuin Univ. (Japan))

**[P25-032]** Hot Electron Transfer Enhanced by Quantum Coherence under Modal Strong Coupling Conditions

\*Yen-En Liu<sup>1</sup>, Xu Shi<sup>1</sup>, Tomohiro Yokoyama<sup>2</sup>, Soshun Inoue<sup>2</sup>, Yuji Sunaba<sup>1</sup>, Tomoya Oshikiri<sup>1,3</sup>, Quan Sun<sup>1</sup>, Mamoru Tamura<sup>2,4</sup>, Hajime Ishihara<sup>2</sup>, Keiji Sasaki<sup>1</sup>, Hiroaki Misawa<sup>1,5</sup> (1. Hokkaido Univ. (Japan), 2. Osaka Univ. (Japan), 3. Tohoku Univ. (Japan), 4. Osaka Metropolitan Univ. (Japan), 5. National Yang Ming Chiao Tung Univ. (Taiwan))

**[P25-033]** Study on the Factors to Determine the Emission Efficiency of the Crystalline-State Chemiluminescence of a Fluorophore-Linked 1,2-Dioxetane

\*Rika Nagumo<sup>1</sup>, Norihisa Yamasaki<sup>1</sup>, Chihiro Matsuhashi<sup>1</sup>, Wanli Xiao<sup>2</sup>, Masashi Hasegawa<sup>2</sup>, Yasuhiro Mazaki<sup>2</sup>, Shojiro Maki<sup>1</sup>, Takashi Hirano<sup>1</sup> (1. The Univ. of electro-comm. (Japan), 2. Kitasato Univ. (Japan))

**[P25-034]** Pressure-Dependent Elementary Exciton Processes of CdSe QDs Assemblies

\*Taiki Yamashita<sup>1</sup>, Daichi Eguchi<sup>1</sup>, Naoto Tamai<sup>1</sup> (1. Kwansai Gakuin Univ. (Japan))

**[P25-035]** Crystal Structures and Piezofluorochromism of Organoboron Complexes with the [2.2]Paracyclophane Moiety

\*Shun Irii<sup>1</sup>, Takuya Ogaki<sup>1,2</sup>, Yoshiki Ozawa<sup>3</sup>, Masaaki Abe<sup>3</sup>, Hiroyasu Sato<sup>4</sup>, Yasunori Matsui<sup>1,2</sup>, Hiroshi Ikeda<sup>1,2</sup> (1. Osaka Metro. Univ. (Japan), 2. RIMED, Osaka Metro. Univ. (Japan), 3. Univ. of Hyogo (Japan), 4. Rigaku (Japan))

**[P25-036]** Systematic Radical Species Control by Electron Push–Pull Substitution in the Perylene-Based D– $\pi$ –A Compounds

\*Mina Ahn<sup>1</sup>, Kyung-Ryang Wee<sup>1</sup> (1. Daegu Univ. (Korea))

**[P25-037]** Controlling Solid-State Emission and Molecular Array via Positional Isomerism in Pt(II) Complex with Donor– $\pi$ –Acceptor Ligand

\*Min-Ji Kim<sup>1</sup>, Kyung-Ryang Wee<sup>1</sup> (1. Daegu Univ. (Korea))

**[P25-038]** Development of a Cross-conjugated Singlet Fission Material with a Wide Excited Singlet–Triplet Energy Gap

\*Tomoki Nagaoka<sup>1</sup>, Yasunori Matsui<sup>1,2</sup>, Masaaki Fuki<sup>3</sup>, Takuya Ogaki<sup>1,2</sup>, Yasuhiro Kobori<sup>3</sup>, Hiroshi Ikeda<sup>1,2</sup> (1. Osaka Metro. Univ. (Japan), 2. RIMED, Osaka Metro. Univ. (Japan), 3. MPRC, Kobe Univ. (Japan))

**[P25-039]** Chiroptical Properties of Chiral Phthalocyanine-based Thin Films

\*Ryo Ishii<sup>1</sup>, Kei Murata<sup>1</sup>, Kazuyuki Ishii<sup>1</sup> (1. Institute of Industrial Science, The Univ. of Tokyo (Japan))

**[P25-040]** Near-Field Hyper-Spectral Imaging of Surface Phonon Polaritons in Quartz

\*Kotaro Shirahata<sup>1</sup>, Aozora Ohi<sup>1</sup>, Shun Hashiyada<sup>1</sup>, Yukio Kawano<sup>1</sup> (1. Chuo Univ. (Japan))

**[P25-041]** Entropic Mixing - Creating a Room Temperature Dye Glass or Liquid

\*Clara Schäfer<sup>1</sup>, Sandra Hultmark<sup>2</sup>, Christian Müller<sup>2</sup>, Karl Börjesson<sup>1</sup> (1. Göteborgs Universitet (Sweden), 2. Chalmers Univ. of Technology (Sweden))

**[P25-042]** Quasi-Reversible Photoinduced Displacement of Aromatic Ligands from Zinc Sulfide Nanocrystals

\*Daisuke Yoshioka<sup>1</sup>, Yusuke Yoneda<sup>2</sup>, I-Ya Chang<sup>3</sup>, Hikaru Kuramochi<sup>2</sup>, Hyeon-Deuk Kim<sup>3</sup>, Yoichi Kobayashi<sup>1,4</sup> (1. Ritsumeikan Univ., College of Life Sciences (Japan), 2. Institute for Molecular Science (Jersey), 3. Kyoto Univ., Graduate School of Science. (Japan), 4. PRESTO, JST (Japan))

**[P25-043]** Controlling Optical Properties of ZnO Nanocrystals by Bulkiness of Alkyl Ligands

\*Yuto Toyota<sup>1</sup>, Shohei Yamashita<sup>2</sup>, Yoshinori Okayasu<sup>1</sup>, Yuki Nagai<sup>1</sup>, Yohei Okada<sup>2</sup>, Yoichi Kobayashi<sup>1,3</sup> (1. Ritsumeikan Univ. (Japan), 2. Tokyo Univ. of Agriculture and Technology (Japan), 3. PRESTO JST (Japan))

**[P25-044]** Opto-mechanical Motion of Microparticles Driven by Optical Pulling Force Due to Stimulated Emission

\*Takato Mizoguchi<sup>1</sup>, Masato Mori<sup>1</sup>, Syoji Ito<sup>1,2</sup>, Hikaru Sotome<sup>1</sup>, Hiroshi Miyasaka<sup>1</sup> (1. Osaka Univ. (Japan), 2. Osaka Metropolitan Univ. (Japan))

**[P25-045]** Vibrationally Resolved Two-Photon Photoemission Spectroscopy for Polycyclic Aromatic Hydrocarbons on a Graphite Substrate: The Effect of Molecular Orientation

\*Shuto Nojima<sup>1</sup>, Natsumi Murase<sup>2</sup>, DaeGwi Kim<sup>1</sup>, Hiroyuki S. Kato<sup>2</sup>, Megumi Akai-Kasaya<sup>2</sup>, Takashi Yamada<sup>2</sup>, Masahiro Shibuta<sup>1</sup> (1. Osaka Metropolitan Univ. (Japan), 2. Osaka Univ. (Japan))

**[P25-046]** Elementary Exciton Dynamics of Copper-doped InP and CdSe Quantum Dots

\*Yamada Ayari<sup>1</sup>, Daichi Eguchi<sup>1</sup>, Naoto Tamai<sup>1</sup> (1. Kwansei Gakuin Univ. (Japan))

**[P25-047]** The Impact of Oligothiophene Linkers in Triplet Formation Pathways of 6,6'-Linked Pentacene Dimers

\*Jieun Lee<sup>1</sup>, Woojae Kim<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-048]** Recovery of Valuable Metals from Wastewater Using Solar Evaporators

\*Yi-Suhan Huang<sup>1</sup> (1. National Ilan Univ. (Taiwan))

**[P25-049]** Optical Trapping of Polymer Nanospheres Using Titanium Nano-wrinkle Structures

\*Masashi Yoshida<sup>1</sup>, Tatsuya Shoji<sup>1,2</sup> (1. Grad. Sch. of Sci., Kanagawa Univ. (Japan), 2. Fac. of Sci., Kanagawa Univ. (Japan))

**[P25-050]** Photoluminescence Enhancement of Ag–In–Ga–S Quantum Dots by Na Doping for the Application to Light-Emitting Diodes

\*Makoto Tozawa<sup>1</sup>, Chie Miyamae<sup>1</sup>, Genichi Motomura<sup>2,3</sup>, Tatsuya Kameyama<sup>1</sup>, Taro Uematsu<sup>2</sup>, Susumu Kuwabata<sup>2</sup>, Tsukasa Torimoto<sup>1</sup> (1. Nagoya Univ. (Japan), 2. Osaka Univ. (Japan), 3. NHK STRL (Japan))

**[P25-051]** Enhancement of Solid-State Photon Upconversion Using a Large Array of Plasmonic Hot Spots

\*Kodai Matsumoto<sup>1</sup>, Udai Danyoshi<sup>1</sup>, Junpei Kondo<sup>1</sup>, Tomohiro Ryu<sup>2</sup>, Takeo Nakano<sup>4,5</sup>, Kiyoshi Miyata<sup>2,5</sup>, Nobuhiro Yanai<sup>1,3,5</sup>, Shigenori Fujikawa<sup>1,3,4,5</sup>, Nobuo Kimizuka<sup>1,3,5</sup> (1. Grad. Sch. of Eng., Kyushu Univ. (Japan), 2. Grad. Sch. of Sci., Kyushu Univ. (Japan), 3. CMS, Kyushu Univ. (Japan), 4. WPI-I2CNER, Kyushu Univ. (Japan), 5. K-NETs, Kyushu Univ. (Japan))

**[P25-052]** Photoluminescence Properties of Au/MoS<sub>2</sub>/WSe<sub>2</sub> Heterostructures

\*Yusuke Takahashi<sup>1</sup>, Keisuke Imaeda<sup>2</sup>, Sou Ryuzaki<sup>2</sup>, Kosei Ueno<sup>2</sup> (1. Graduate School of Chemical Sciences and Engineering, Hokkaido Univ. (Japan), 2. Department of Chemistry, Faculty of Science, Hokkaido Univ. (Japan))

**[P25-053]** Dependence of Photoelectrochemical Properties of AgBiS<sub>2</sub> Quantum Dots on Their Size and Composition

\*Wentao Zhang<sup>1</sup>, Kazutaka Akiyoshi<sup>1</sup>, Tatsuya Kameyama<sup>1</sup>, Tsukasa Torimoto<sup>1</sup> (1. Graduate School of Engineering, Nagoya Univ. (Japan))

**[P25-054]** Spectral Properties of Periodic Au Nanostructures Fabricated on the Al<sub>2</sub>O<sub>3</sub>/Au Substrate

\*Xiongjunyi Qian<sup>1</sup>, Xiaotong Pan<sup>1</sup>, Keisuke Imaeda<sup>2</sup>, Sou Ryuzaki<sup>2</sup>, Kosei Ueno<sup>2</sup> (1. Graduate School of Chemical Sciences and Engineering, Hokkaido Univ. (Japan), 2. Department of Chemistry, Faculty of Science, Hokkaido Univ. (Japan))

**[P25-055]** A Study on the Effect of Infrared Plasmons on Optical Phonons

\*Shimba Ushikoshi<sup>1</sup>, Yusuke Takahashi<sup>1</sup>, Keisuke Imaeda<sup>2</sup>, Sou Ryuzaki<sup>2</sup>, Kosei Ueno<sup>2</sup> (1. Graduate School of Chemical Sciences and Engineering, Hokkaido Univ. (Japan), 2. Department of Chemistry, Faculty of Science, Hokkaido Univ. (Japan))

**[P25-056]** Coherent Control of Plasmon-Induced Photochemical Reactions

\*Peixin Wang<sup>1</sup>, Xiaotong Pan<sup>1</sup>, Keisuke Imaeda<sup>2</sup>, Sou Ryuzaki<sup>2</sup>, Kosei Ueno<sup>2</sup> (1. Graduate School of Chemical Sciences and Engineering, Hokkaido Univ. (Japan), 2. Department of Chemistry, Faculty of Science, Hokkaido Univ. (Japan))

**[P25-057]** TEM Imaging of Out-of-Equilibrium Single-Wall Molecular Nanotubes

\*Sundar Raj Krishnaswamy<sup>1</sup>, Ivo A Gabrovski<sup>1</sup>, Marc C.A Stuart<sup>1</sup>, Ilias Patmanidis<sup>1</sup>, Alex de Vries<sup>1</sup>, Maxim S Pshenichnikov<sup>1</sup> (1. Univ. of Groningen (Netherlands))

**[P25-058]** Thermodynamically Size- and Shape-Controlled Crystallization of MAPbBr<sub>3</sub> Single Crystals

\*Dong Zhang<sup>1</sup>, Takuya Okamoto<sup>1,2</sup>, Vasudevan Pillai Biju<sup>1,2</sup> (1. Graduate School of Environmental Science, Hokkaido Univ. (Japan), 2. Research Institute for Electronic Science, Hokkaido Univ. (Japan))

**[P25-059]** Preparation of SnO<sub>2</sub>-rGO Composites by Laser Ablation Method and Evaluation of Their Photocatalytic Performance

\*Yasuyuki Maeda<sup>1</sup>, Tetsuro Katayama<sup>1</sup>, Pankaj Koinkar<sup>1</sup>, Akihiro Furube<sup>1</sup> (1. Tokushima Univ. (Japan))

**[P25-060]** Size Reduction of  $Y_2Ti_2O_5S_2$  Photocatalyst Particles by Laser Ablation and Evaluation of Their Carrier Dynamics

\*Renna Hosaki<sup>1</sup>, Yasuyuki Maeda<sup>1</sup>, Tetsuro Katayama<sup>1</sup>, Pankaj Koinkar<sup>1</sup>, Akihiro Furube<sup>1</sup>, Lihua Lin<sup>2</sup>, Takashi Hisatomi<sup>2</sup>, Kazunari Domen<sup>2,3</sup> (1. Tokushima Univ. (Japan), 2. Shinshu Univ. (Japan), 3. The Univ. of Tokyo (Japan))

**[P25-061]** Narrowing the Emission Peak of Cu–In–Ga–S Quantum Dots for Highly Chromatic Electroluminescence

\*Chang Jiang<sup>1</sup>, Kazutaka Akiyoshi<sup>1</sup>, Tatsuya Kameyama<sup>1</sup>, Genichi Motomura<sup>2,3</sup>, Yoshihide Fujisaki<sup>2</sup>, Taro Uematsu Uematsu<sup>3,4</sup>, Susumu Kuwabata<sup>3,4</sup>, Tsukasa Torimoto<sup>1</sup> (1. Graduate School of Engineering, Nagoya Univ. (Japan), 2. Japan Broadcasting Corporation (NHK) (Japan), 3. Department of Applied Chemistry, Graduate School of Engineering, Osaka Univ. (Japan), 4. Innovative Catalysis Science Division, Institute for Open and Transdisciplinary Research Initiatives (ICS-OTRI), Osaka Univ. (Japan))

**[P25-062]** Preparation of Photoresponsive Microcapsules for X-ray Detection via Fluorescence Modulation

\*Magin Benedict Fernandez Ferrer<sup>1,2</sup>, Daiyu Harada<sup>1</sup>, Kazuma Yasuhara<sup>1</sup>, Takayuki Yanagida<sup>1</sup>, Noriaki Kawaguchi<sup>1</sup>, Marine Louis<sup>1</sup>, Remi Metivier<sup>2</sup>, Clemence Allain<sup>2</sup>, Keitaro Nakatani<sup>2</sup>, Tsuyoshi Kawai<sup>1</sup> (1. Nara Institute of Science and Technology (Japan), 2. PPSM, ENS Paris-Saclay (France))

**[P25-063]** Controlled Energy Channeling in Double-Walled Supramolecular Nanotubes

\*Aleksi Kuevda<sup>1</sup>, Pieter Brongers<sup>1</sup>, Sundar Raj Krishnaswamy<sup>1</sup>, Maxim Pshenichnikov<sup>1</sup> (1. Univ. of Groningen (Netherlands))

**[P25-064]** Single Extracellular Vesicles Detected by Post-labeling Method on the Plasmonic Chips with a Fluorescence Microscope

\*Makoto Tokami<sup>1</sup>, Kazuma Fukutomi<sup>1</sup>, Yasunori Nawa<sup>1</sup>, Keiko Tawa<sup>1</sup> (1. Kwansai Gakuin Univ. (Japan))

**[P25-065]** Selective Excitation of Optically Forbidden Transitions by Plasmonic Multimer Structure

\*Yuji Sunaba<sup>1</sup>, Christophe Pin<sup>1</sup>, Keiji Sasaki<sup>1</sup> (1. Hokkaido Univ. (Japan))

**[P25-066]** Quantum-coherence-enhanced Raman Scattering under Modal Ultrastrong Coupling Conditions

\*Yoshiki Suganami<sup>1</sup>, Tomoya Oshikiri<sup>1,2</sup>, Hideyuki Mitomo<sup>1</sup>, Keiji Sasaki<sup>1</sup>, Yen En Liu<sup>1</sup>, Xu Shi<sup>3</sup>, Yasutaka Matsuo<sup>1</sup>, Kuniharu Ijiri<sup>1</sup>, Hiroaki Misawa<sup>1,4</sup> (1. RIES, Hokkaido Univ. (Japan), 2. IMRAM, Tohoku Univ. (Japan), 3. CRI, Hokkaido Univ. (Japan), 4. National Yang Ming Chiao Tung Univ. (Taiwan))

**[P25-067]** Fabrication of Nano Structure for Matrix Free Mass Spectrometry

\*Ryota Saito<sup>1</sup>, Hiroshi Furutani<sup>2</sup>, Junichi Osuga<sup>2</sup>, Michisato Toyoda<sup>2</sup>, Yasutaka Matsuo<sup>3</sup> (1. Graduate School of Chemical Sciences and Engineering, Hokkaido Univ. (Japan), 2. Project Research Center for Fundamental Sciences, Graduate School of Science, Osaka Univ. (Japan), 3. Research Institute for Electronic Science, Hokkaido Univ. (Japan))

**[P25-068]** Linear and Nonlinear Optical Properties of Gold Nanoparticle Assembly Prepared by Laser Manipulation

\*Motoha Miura<sup>1</sup>, Seiju Hasegawa, Kohei Imura (1. Waseda Univ. (Japan))

**[P25-069]** Space-Selective Polymerization of Organic Molecules in Single Microcrystals by Electron Beam Irradiation

\*Ken Morita<sup>1</sup>, Kohei Imura<sup>1</sup> (1. Waseda Univ. (Japan))

**[P25-070]** Optimal Spatial Thickness Between Plasmonic Metal Nanoparticles and Triplet Annihilation-Based Upconversion Thin Films for Efficient Upconverted Emission

\*Jotaro Honda<sup>1</sup>, Seiya Fukumura<sup>1</sup>, Kosuke Sugawa<sup>1</sup>, Joe Otsuki<sup>1</sup> (1. Nihon Univ. (Japan))

**[P25-071]** Thiol Desorption in Model Plasmon Catalysis Reaction p-Nitrothiophenol Dimerization

\*Alina Gorbunova<sup>1</sup>, Oleg Semyonov<sup>1</sup>, Pavel Postnikov<sup>1</sup>, Olga Guselnikova<sup>1,2</sup> (1. Research School of Chemistry & Applied Biomedical Sciences, Tomsk Polytechnic Univ. (Russia), 2. JST-ERATO Yamauchi Materials Space-Tectonics Project, International Center for Materials Nanoarchitectonics (WPI-MANA), National Institute for Materials Science (Japan))

**[P25-072]** Nitric Oxide, an O<sub>2</sub>-Economizer, Reanimates Photodynamic Therapy against Hypoxic Tumors along with Enhanced Immune Responses

\*Feijie Xu<sup>1</sup>, Meijun Wang<sup>1</sup>, Eunice Dotse<sup>1</sup>, Kwan Ting Chow<sup>1</sup>, Gigi Puichi Lo<sup>1</sup> (1. City Univ. of Hong Kong (China))

**[P25-073]** Structure-Activity Relationship Studies of Photocontrollable NO Releasers Containing 10-Substituted Rhodamines as Antennae

\*Daisuke Saitoh<sup>1</sup>, Sae Kitamura<sup>2</sup>, Naoya Ieda<sup>1</sup>, Kyoya Oyama<sup>2</sup>, Yuji Hotta<sup>3</sup>, Mitsuyasu Kawaguchi<sup>1</sup>, Kazunori Kimura<sup>3</sup>, Hidehiko Nakagawa<sup>1</sup> (1. Grad. Sch. of Pharm. Sci., Nagoya City Univ. (Japan), 2. Fac. of Pharm. Sci., Nagoya City Univ. (Japan), 3. Grad. Sch. of Med. Sci., Nagoya City Univ. (Japan))

**[P25-074]** Spectroscopic Study on Optical Trapping-Driven Protein Crystallization

\*Tien Chen<sup>1</sup>, Hirotsugu Hiramatsu<sup>1</sup>, Teruki Sugiyama<sup>1,2</sup> (1. National Yang Ming Chiao Tung Univ. (Taiwan), 2. Nara Institute of Science and Technology (Japan))

**[P25-075]** Effects of the Fluorine Substitution on the Excited State of Phenylethynyl-thiouridine

\*Rin Sato<sup>1</sup>, Wataru Kashihara<sup>1</sup>, Tatsuya Nishihara<sup>1</sup>, Kazuhito Tanabe<sup>1</sup>, Tadashi Suzuki<sup>1</sup> (1. Aoyama Gakuin Univ. (Japan))

**[P25-076]** Photocrosslinking in Oligonucleotides Labeled with 5-Fluoro-4-Thiouridine as a Tool for DNA-Sensing Probes Design

\*Jakub Zubertowski<sup>1</sup>, Joanna Nowak - Karnowska<sup>1</sup> (1. Adam Mickiewicz Univ. in Poznan (Poland))

**[P25-077]** Nanoparticles of Lactose-Substituted BODIPY Dyes for Imaging-Guided Photodynamic Therapy

\*Chanwoo Kim<sup>1</sup>, Duy Khuong Mai<sup>2</sup>, Ho-Joong Kim<sup>2</sup>, Jaesung Yang<sup>1</sup> (1. Yonsei Univ. (Korea), 2. Chosun Univ. (Korea))

**[P25-078]** Cancelled

**[P25-079]** Impact of the Chemical Composition and Nanostructure of MO Oxysulfide Based Semiconductors on Gas-Phase Photocatalytic Reduction of CO<sub>2</sub>

\*Sébastien Roth<sup>1</sup>, Audrey Bonduelle-Skrzypczak<sup>1</sup>, Christèle Legens<sup>1</sup>, Julie Marin<sup>1</sup>, Victor Mougel<sup>2</sup>, Christophe Copéret<sup>2</sup>, Pascal Raybaud<sup>1</sup> (1. IFP Energies Nouvelles (France), 2. ETH Zürich (Switzerland))

**[P25-080]** Effect of PT Co-catalyst Loading Site on Photoreduction Efficiency in Titania Nanosheet

\*Yugo Hirade<sup>1</sup>, Koki Fukushima<sup>1</sup>, Tetsuya Shimada<sup>1</sup>, Tamao Ishida<sup>1</sup>, Shinsuke Takagi<sup>1</sup> (1. Tokyo Metropolitan Univ. (Japan))

**[P25-081]** Supported Ru Nanocatalyst over Layered Double Hydroxides for Carbon Dioxide Hydrogenation

\*Pin-Jung Ko<sup>1</sup> (1. Department of Environmental Engineering, National Ilan Univ. (Taiwan))

**[P25-082]** Separation and Transformation of Carbon Black from Waste Tires and Its Application in Solar-Driven Photothermal Desalination

\*Hong-Yu Gao<sup>1</sup> (1. Depart of Environmental Engineering, National Ilan Univ. (Taiwan))

**[P25-083]** Photocatalytic Hydrogen Evolution Reaction in Aqueous Media under Visible-Light Irradiation Using a Framework Catalysts Constructed by Hydrogen Bonding of Dinuclear Rh Complexes

\*Yuka Kiyokawa<sup>1</sup>, Hikaru Iwami<sup>1</sup>, Kento Kosugi<sup>1</sup>, Yutaka Saga<sup>1</sup>, Mio Kondo<sup>1,2</sup>, Shigeyuki Masaoka<sup>1</sup> (1. Osaka Univ. (Japan), 2. JST PRESTO (Japan))

**[P25-084]** Spatiotemporal Carrier Dynamics of Pyrene Incorporated Multi-Cation Halide Perovskites with High Stability

\*Yu Jin Lee<sup>1</sup>, Junghwan Lee<sup>1</sup>, Jong Hyeok Park<sup>1</sup>, Dongho Kim<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-085]** Highly Efficient Supramolecular Photocatalyst for CO<sub>2</sub> Reduction with Eight C–C Bonds Between RU(lI) Photosensitizer and Re(I) Catalyst Unit

\*Kei Kamogawa<sup>1</sup>, Antonio Santoro<sup>2</sup>, Ambra M Cancelliere<sup>2</sup>, Yuushi Shimoda<sup>3</sup>, Kiyoshi Miyata<sup>3</sup>, Ken Onda<sup>3</sup>, Fausto Putoriero<sup>2</sup>, Sebastiano Campagna<sup>2</sup>, Yusuke Tamaki<sup>4</sup>, Osamu Ishitani<sup>1,5</sup> (1. Tokyo Inst. of Tech. (Japan), 2. The Univ. of Messina (Italy), 3. Kyushu Univ. (Japan), 4. National Institute of Advanced Industrial Science and Technology (Japan), 5. Hiroshima Univ. (Japan))

**[P25-086]** Photoelectrochemical CO<sub>2</sub> Reduction to Produce Green Syngas Using the Powder-Based Cu<sub>3</sub>VS<sub>4</sub> Photocathode Utilizing a Whole Range of Visible Light

\*Kengo Nagatsuka<sup>1</sup>, Yuichi Yamaguchi<sup>1,2</sup>, Akihiko Kudo<sup>1,2</sup> (1. Tokyo Univ. Science (Japan), 2. CVRC, RIST TUS (Japan))

**[P25-087]** Impact of Non-Fullerene Acceptor Steric Structure on Photoinduced Charge-Separation Geometry in Bulk-Heterojunction Film Studied by Time-Resolved EPR

\*Kasumi Murayama<sup>1</sup>, Seihou Jinnai<sup>2</sup>, Ie Yutaka<sup>2</sup>, Yasuhiro Kobori<sup>1,3</sup> (1. Graduate School of Science, Kobe Univ. (Japan), 2. The Institute of Scientific and Industrial Research, Osaka Univ. (Japan), 3. Molecular Photoscience Research Center, Kobe Univ. (Japan))

**[P25-088]** Nickelladithiolene Two-Dimensional Metal-Organic Framework Acts as a Hydrogen Evolution Cocatalyst for Overall Photocatalytic Water Splitting

\*Jingyan Guan<sup>1</sup>, Hajime Suzuki<sup>1</sup>, Osamu Tomita<sup>1</sup>, Akinobu Nakada<sup>1</sup>, Ryota Sakamoto<sup>2</sup>, Ryu Abe<sup>1</sup> (1. Kyoto Univ. (Japan), 2. Tohoku Univ. (Japan))

**[P25-089]** Construction of a Biphasic Photocatalytic System Driven by Electron Mediators Migrating Across Liquid-Liquid Interphase

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**[P25-090]** Development of Sn<sup>2+</sup>-Based Pyrochlore Oxysulfides with Narrow Band Gaps for Visible-Light-Driven Water Splitting

\*Makoto Ogawa<sup>1</sup>, Hajime Suzuki<sup>1</sup>, Osamu Tomita<sup>1</sup>, Akinobu Nakada<sup>1</sup>, Ryu Abe<sup>1</sup> (1. Kyoto Univ. (Japan))

**[P25-091]** Introducing Proton/Electron Mediators Enhances Catalytic Ability of Iron Porphyrin Complex for Photochemical CO<sub>2</sub> Reduction

\*Maho Imai<sup>1</sup>, Kento Kosugi<sup>1</sup>, Yutaka Saga<sup>1</sup>, Mio Kondo<sup>1,2</sup>, Shigeyuki Masaoka<sup>1</sup> (1. Osaka Univ. (Japan), 2. JST PRESTO (Japan))

**[P25-092]** Temperature Dependence of Photocatalytic Water Splitting over Single Particulated IrO<sub>x</sub>/SrTiO<sub>3</sub>:Rh,Sb Sequentially Loaded with a Rh Cocatalyst Under Visible Light Irradiation

\*Erika Kikuchi<sup>1</sup>, Yuichi Yamaguchi<sup>1,2</sup>, Akihiko Kudo<sup>1,2</sup> (1. Tokyo Univ. Science (Japan), 2. CVRC, RIST TUS (Japan))

**[P25-093]** A Lead-Free with Single/Double Halogen Layers as a Promising Photocatalyst for Visible-Light Water Splitting

A Lead-Free Sillén-type  $\text{SrBi}_3\text{O}_4\text{Cl}_3$  with Single/Double Halogen Layers as a Promising Photocatalyst for Visible-Light Water Splitting

\*Yusuke Ishii<sup>1</sup>, Hajime Suzuki<sup>1</sup>, Osamu Tomita<sup>1</sup>, Ryu Abe<sup>1</sup> (1. Kyoto Univ. (Japan))

**[P25-094]** Construction of an Interparticle Z-Scheme Water Splitting System Using a Metal Hexacyanoferrate as a Solid Electron Mediator

\*Tomoki Inoue<sup>1</sup>, Hikaru Matsuoka<sup>1</sup>, Hajime Suzuki<sup>1</sup>, Osamu Tomita<sup>1</sup>, Akinobu Nakada<sup>1</sup>, Ryu Abe<sup>1</sup> (1. Kyoto Univ. (Japan))

**[P25-095]** Ocean Splits Ocean: Use of  $\text{Bi}_4\text{TaO}_8\text{Cl}$  as Efficient Piezocatalysts

\*Maqsuma Banoo<sup>1</sup>, Ujjal k Gautam<sup>2</sup> (1. Department of Chemical Sciences, IISER Mohali (India), 2. Department of Chemical Sciences, IISER Mohali (India))

**[P25-096]** Porous Silicon Decorated with Au/TiO<sub>2</sub> Nanocomposites for Efficient Photo-induced Enhanced Raman Spectroscopy (PIERS)

\*Vincent Hsiao<sup>1</sup>, Wei-Ning Gao<sup>1</sup> (1. National Chi Nan Univ. (Taiwan))

**[P25-097]** Photocatalysis and Photoswitching of Covalently Dynamic Systems

\*Anna Nožičková<sup>1</sup>, Karolína Křížová<sup>1</sup>, Martin Šetek<sup>1</sup>, Valentino L. P. Guerra<sup>1</sup>, Anna Heleveria<sup>1</sup>, Petr Kovaříček<sup>1</sup> (1. Univ. of Chemistry and Technology Prague (Czech Republic))

**[P25-098]** Diindolocarbazole-based Twisted Organic D-A TADF Emitters for Photocatalysis and Organic Light Emitting Diodes

\*Sushil Sharma<sup>1</sup>, Sanchita Sengupta<sup>2</sup> (1. Student (India), 2. Professor (India))

**[P25-099]** Cancelled

**[P25-100]** Effect of Addition of Os(II) Complex Photosensitizers on CO<sub>2</sub> Reduction Photocatalysis of Ru(II)-Re(I)/anatase TiO<sub>2</sub>/nanosheet C<sub>3</sub>N<sub>4</sub>

\*Toshiya Tanaka<sup>1</sup>, Noritaka Sakakibara<sup>1</sup>, Yusuke Tamaki<sup>2</sup>, Kazuhiko Maeda<sup>1</sup>, Osamu Ishitani<sup>1,3</sup> (1. Tokyo Institute of technology (Japan), 2. National Institute of Advanced Industrial Science and Technology (Japan), 3. Hiroshima Univ. (Japan))

**[P25-101]** Effect of Anionic Polymer Modification of Dye-Sensitized Photocatalyst on Hydrogen Evolution Activity

\*Haruka Yamamoto<sup>1</sup>, Shunta Nishioka<sup>1</sup>, Yugo Miseki<sup>2</sup>, Kazuhiro Sayama<sup>2</sup>, Thomas E. Mallouk<sup>3</sup>, Kazuhiko Maeda<sup>1</sup> (1. Tokyo Institute of Technology (Japan), 2. National Institute of Advanced Industrial Science and Technology (Japan), 3. Univ. of Pennsylvania (USA))

**[P25-102]** Highly Efficient Photocatalytic CO<sub>2</sub> Reduction Promoted by a Carboxyl-Bridged Iron Porphyrin Framework

\* Xianjun Li<sup>1</sup>, Kento Kosugi<sup>1</sup>, Maho Imai<sup>1</sup>, Yutaka Saga<sup>1</sup>, Mio Kondo<sup>1,2</sup>, Shigeyuki Masaoka<sup>1</sup> (1. Osaka Univ. (Japan), 2. JST PRESTO (Japan))

**[P25-103]** Photo-Aerobic Ring Expansions of 1-Alkenyl-Cyclobutanols Utilizing Selenium- $\pi$ -Acid-Catalysis

\*Daniela Fritsch<sup>1</sup>, Kilian Müller<sup>1</sup>, Tao Lei<sup>1</sup>, Alexander Breder<sup>1</sup> (1. Univ. of Regensburg (Germany))

**[P25-104]** Photocatalytic 3-Component Acylcarboxylation of Alkenes with CO<sub>2</sub>

\*Taito Watanabe<sup>1</sup>, Yutaka Saga<sup>1</sup>, Kento Kosugi<sup>1</sup>, Mio Kndo<sup>1,2</sup>, Shigeyuki Masaoka<sup>1</sup> (1. Osaka Univ. (Japan), 2. JST PRESTO (Japan))

**[P25-105]** Visible-Light Illuminated Hydrogen Evolution Using Dye-Semiconductor Hybrids: Effect of Acrylic Acid-Type Anchors of Chlorophyll-a Derivatives Photosensitizer

\*Yudai Hoshi<sup>1</sup>, Hajime Suzuki<sup>2</sup>, Ryu Abe<sup>2</sup>, Hitoshi Tamiaki<sup>1</sup> (1. Ritsumeikan Univ. (Japan), 2. Kyoto Univ. (Japan))

**[P25-106]** Gas Phase Hydrogen Sulfide Degeneration using Visible-Light Responsive g-C<sub>3</sub>N<sub>4</sub> Hybrid Photocatalysts

\*Tomofumi Katayama<sup>1</sup>, Morio Nagata<sup>1</sup> (1. Tokyo Univ. of Science (Japan))

**[P25-107]** Photocatalytic Cross-Pinacol Coupling Promoted by Carbon Dioxide

\*Teruki Takahashi<sup>1,2</sup>, Shintaro Okumura<sup>1,2</sup>, Kaoru Torii<sup>1</sup>, Yasuhiro Uozumi<sup>1,2</sup> (1. Institute for Molecular Science (Japan), 2. The Graduate Univ. for Advanced Studies (Japan))

**[P25-108]** Spectroscopic Study on the Photocatalytic Generation of Alkoxy Radicals as a Selective Hydrogen Atom Transfer Reagent Using a Fluorinated Ce(IV)-Complex

\*Marcel Fischer<sup>1</sup>, Jessica Stahl<sup>2</sup>, Kevin Artmann<sup>1</sup>, Burkhard König<sup>2</sup>, Patrick Nuernberger<sup>1</sup> (1. Institute for Physical and Theoretical Chemistry, Univ. of Regensburg (Germany), 2. Institute for Organic Chemistry, Univ. of Regensburg (Germany))

**[P25-109]** Accumulation of Re-Complex-Based Catalytic Centers in Metal-Organic Cages for Photochemical CO<sub>2</sub> Reduction/Insertion

\*Masaki Kitada<sup>1</sup>, Zi Lang Goo<sup>1</sup>, Kento Kosugi<sup>1</sup>, Yutaka Saga<sup>1</sup>, Nobuto Yoshinari<sup>2</sup>, Mio Kondo<sup>1,3</sup>, Shigeyuki Masaoka<sup>1</sup> (1. Division of Applied Chemistry, Graduate School of Engineering, Osaka Univ. (Japan), 2. Department of Chemistry Graduate School of Science, Osaka Univ. (Japan), 3. PRESTO, Japan Science and Technology Agency (JST) (Japan))

**[P25-110]** Synthesis of a Polymer Photocatalyst Polymerized with Tetrahydroxybenzene and Its Activity for Hydrogen Peroxide Generation

\*Honoka Shima<sup>1</sup>, Hisanao Usami<sup>1</sup> (1. Shinshu Univ. (Japan))

**[P25-111]** Photocatalytic CO<sub>2</sub> Reduction Using Mixed Catalyst of an Fe ion with Bipyridine Derivatives

\*Masao Kurosu<sup>1</sup>, Hiroyuki Takeda<sup>1</sup>, Motoko S. Asano<sup>1</sup> (1. Grad. Sch. Sci. Tech., Gunma Univ. (Japan))

**[P25-112]** Complete Decomposition of Volatile Organic Compounds (VOCs) On Titanium Dioxide (TiO<sub>2</sub>) Photocatalyst Under Visible-Light Irradiation

\*Kosuke Imai<sup>1</sup>, Shinya Higashimoto<sup>1</sup>, Takashi Fukushima<sup>1</sup> (1. Department of Applied Chemistry, Faculty of Engineering, Osaka Institute of Technology (Japan))

**[P25-113]** FeNi Electrocatalyst for Urea Oxidation Using a Photovoltaic-Electrolysis Cell System with Perovskite Tandems Cell

\*Chanmin Jo<sup>1</sup>, Dongin Choi<sup>2</sup>, Hyunjung Lee<sup>1</sup>, Uk Sim<sup>1,2,3</sup> (1. Korea Institute of Energy Technology (Korea), 2. NEEL Sciences, INC. (Korea), 3. Chonnam National Univ. (Korea))

**[P25-114]** Preparation and Characterization of Titania Photocatalyst with Gold Nanoparticles Using Raman Spectroscopy

\*Shingo Furukawa<sup>1</sup>, Mai Takase<sup>1</sup> (1. Grad. School Eng., Muroran Inst. Tech. (Japan))

**[P25-115]** Real-Time In-Situ Monitoring of Nanocrystal Formation and Ion Migration in Perovskite-Metal Organic Framework Composites

\*Xiayan Wu<sup>1</sup>, Shun Omagari<sup>1</sup>, Jinwei Gao<sup>2</sup>, Martin Vacha<sup>1</sup> (1. Tokyo Institute of Technology (Japan), 2. South China Normal Univ. (China))

**[P25-116]** Using Photo-Activated Localization Microscopy (PALM) For Imaging Fluorophore-Doped Photoresists

\*Madeline Rodenberg<sup>1</sup>, Lukas Jonathan Munker<sup>2</sup>, Rainer Tutsch<sup>3</sup>, Peter Jomo Walla<sup>4</sup>, Thomas Weimann<sup>5</sup> (1. TU Braunschweig, Institute of Production Metrology (Germany), 2. TU Braunschweig, Institute of Physical and Theoretical Chemistry (Germany), 3. TU Braunschweig, Institute of Production Metrology (Germany), 4. TU Braunschweig, Institute of Physical and Theoretical Chemistry (Germany), 5. Physikalisch-Technische Bundesanstalt Braunschweig, Department Quantum Electronics (Germany))

**[P25-117]** Suppressing Blinking in CsPbBr<sub>3</sub> Perovskite Nanocrystals through Ligand Exchange

\*Toranosuke Takagi<sup>1</sup>, Shun Omagari<sup>1</sup>, Martin Vacha<sup>1</sup> (1. Department of Materials Science and Engineering, Tokyo Institute of Technology (Japan))

**[P25-118]** Enhanced Photoluminescence of CdSe/ZnS Core-shell Quantum Dots Induced by Surface Plasmon Nanohole Arrays

\*Qiwen Tan<sup>1</sup>, Shun Omagari<sup>1</sup>, Martin Vacha<sup>1</sup> (1. Tokyo Institute of Technology (Japan))

**[P25-119]** Intermittent Charge Transfer on  $\text{CH}_3\text{NH}_3\text{PbI}_3$  in Aqueous Solution Revealed by Single-Particle Spectroscopy

\*Aito Takeuchi<sup>1</sup>, Yoshitaka Kumabe<sup>2</sup>, Takashi Tachikawa<sup>1,2</sup> (1. Grad. Sch. of Sci., Kobe Univ. (Japan), 2. Mol. Photosci. Res. Center, Kobe Univ. (Japan))

**[P25-120]** Evaluation of Energy Transfer from Multiple Excitons in a CdSe Quantum Dot to Multiple Perylene Bisimide Molecules

\*Miyu Yoshioka<sup>1</sup>, Mitsuaki Yamauchi<sup>2</sup>, Sadahiro Masuo<sup>1</sup> (1. Kwansei Gakuin Univ. (Japan), 2. Kyoto Univ. (Japan))

**[P25-121]** Construction of Ordered Perovskite Nanocrystal Aggregates by Supramolecular Approach

\*Naoki Kubo<sup>1</sup>, Mitsuaki Yamauchi<sup>2</sup>, Sadahiro Masuo<sup>1</sup> (1. Kwansei Gakuin Univ. (Japan), 2. Kyoto Univ. (Japan))

**[P25-122]** Evaluation of Energy Transfer from  $\text{CsPbBr}_3$  Perovskite Nanoplatelet to Perylene Bisimide Derivative

\*Issei Inoue<sup>1</sup>, Naoki Kubo<sup>1</sup>, Sadahiro Masuo<sup>1</sup> (1. Kwansei Gakuin Univ. (Japan))

**[P25-123]** Nanoscale Structural Heterogeneity in Intra- and Interchain Entangled Polymer Network Probed by Single-Molecule Tracking

\*Hyeyoung Joung<sup>1</sup>, Jaesung Yang<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-124]** Environment-Dependent Single Particle Photophysical Properties of Cesium Lead Bromide Perovskite Quantum Dots

\*Jaesang Yu<sup>1</sup>, Jaesung Yang<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-125]** Synthesis and Single-Particle Spectroscopy of Trivalent Metal Ion-Doped  $\text{CsPbBr}_3$  Perovskite Quantum Dots

\*Jinwoong Jo<sup>1</sup>, Jaesung Yang<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-126]** Mechanistic Study of the Oxidation Reaction of Caffeic Acid Under UV Irradiation

\*Yuito Kitagawa<sup>1</sup>, Sorai Kanno<sup>1</sup>, Kenji Matsumoto<sup>2</sup>, Yoshio Tsujino<sup>2</sup>, Toshiyuki Osakai<sup>3</sup>, Hiroki Hotta<sup>1,2</sup> (1. Graduate School of Maritime Sciences, Kobe Univ. (Japan), 2. Graduate School of Sciences, Technology and Innovation, Kobe Univ. (Japan), 3. Graduate School of Sciences, Kobe Univ. (Japan))

**[P25-127]** pH Switched Time-Indicator: Kinetically Conversion of Triarylmethane into Rhodol

\*Rina Ueda<sup>1</sup>, Mei Harada<sup>2</sup>, Shun Miura<sup>2</sup>, Tohru Obata<sup>1,2</sup>, Shinichiro Kamino<sup>1,2</sup> (1. Grad. Sch. of Pharm., Aichi Gakuin Univ. (Japan), 2. Sch. of Pharm., Aichi Gakuin Univ. (Japan))

**[P25-128]** Nanoparticle Shape Effects on Diffusion Dynamics in Entangled Polymer Network Probed by Single Particle Tracking

\*Dongho Kang<sup>1</sup>, Jaesung Yang<sup>1</sup> (1. Yonsei Univ. (Korea))

**[P25-129]** Single-Particle Fluorescence Measurement of Peryleneimide Nanoparticles

\*Tsukimi Iteya<sup>1</sup>, Hirotaka Kageyama<sup>1</sup>, Ali Eftekhari<sup>2</sup>, Aude Bouchet<sup>2</sup>, Michel Sliwa<sup>2</sup>, Syota Hamatani<sup>3</sup>, Daichi Kitagawa<sup>3</sup>, Seiya Kobatake<sup>3</sup>, Hikaru Sotome<sup>1</sup>, Syoji Ito<sup>1,3</sup>, Hiroshi Miyasaka<sup>1</sup> (1. Osaka Univ. (Japan), 2. CNRS - Univ. Lille (France), 3. Osaka Metropolitan Univ. (Japan))

**[P25-130]** Optical Trapping Dynamics of Molecules in Cultured Hippocampal Neurons Analyzed by Raman Spectroscopy

\*Kazuma Nishimura<sup>1</sup>, Kyoko Masui<sup>1</sup>, Chie Hosokawa<sup>1</sup> (1. Osaka Metropolitan Univ. (Japan))

**[P25-131]** Regulation of Molecular Dynamics on Substrate-Supported Lipid Bilayer by Optical Tweezers

\*Shunya Moriyama<sup>1</sup>, Yasushi Tanimoto<sup>1</sup>, Kyoko Masui<sup>1</sup>, Chie Hosokawa<sup>1</sup> (1. Osaka Metropolitan Univ. (Japan))

**[P25-132] Cancelled**

**[P25-133]** Development of New Emitters for Visible-to-UVB Photon Upconversion

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**[P25-134] Cancelled**

**[P25-135]** Red, Green, and Blue Radio-Luminescent Polymer Dots Doped with Heteroleptic Tris-Cyclometalated Iridium Complexes

\*Zuoyue LIU<sup>1</sup>, Hieu Thi Minh Nguyen<sup>2</sup>, Daiki Asanuma<sup>1</sup>, Sachiko Tojo<sup>1</sup>, Minoru Yamaji<sup>3</sup>, Kiyohiko Kawai<sup>1,4</sup>, Guillem Pratx<sup>2</sup>, Mamoru Fujitsuka<sup>1</sup>, Yasuko Osakada<sup>1,5</sup> (1. SANKEN, Osaka Univ. (Japan), 2. Stanford Univ. (United States of America), 3. Gunma Univ. (Japan), 4. Tokyo Tech. (Japan), 5. IACS., Osaka Univ. (Japan))

**[P25-136]** Circularly Polarized Luminescence of Chiral Eu(III) Coordination Polymers with Ligand Field Strain

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**[P25-137]** Red Emission of Cs<sub>2</sub>NalnCl<sub>6</sub> Double Perovskite Quantum Dots

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**[P25-138]** Through-space Donor-acceptor (D-A) Type Hybridized Local and Charge Transfer (HLCT) Emitter for Deep-Blue OLEDs

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**[P25-139]** Boron-Containing Hot Exciton Emitters for Highly Efficient Non-doped Blue OLEDs

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**[P25-140]** Heat-Induced Modulating the Excitonic Properties of Halide Perovskite Assemblies using Polymer Microenvironments

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**[P25-141]** Development of Luminescent Mica Nanosheets Based on TiO<sub>2</sub>/Eu Hybrid System

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**[P25-142]** Ultraviolet Up-conversion Luminescence of Nd/Tm Hybrid Microparticles

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**[P25-143]** Chiroptical Properties of Helical Arrangement in One-dimensional Perovskite Thin Films  
Atsushi Fukasawa<sup>1</sup>, \*Yusuke Kinoshita<sup>2</sup>, Ayumi Ishii<sup>1,2</sup> (1. Teikyo Univ. of Sci. (Japan), 2. Waseda Univ. (Japan))

**[P25-144]** Novel Photofunctional Network Polymer Controlling Both Luminescence and Coloration Incorporating Luminescent Leuco Dye

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**[P25-145]** Highly Effective Thermally Activated Delayed Fluorescence Emitters Based on Symmetry and Asymmetry Nicotinonitrile Derivatives

\*Chae Won Park<sup>1</sup>, Min Gyeong Choi<sup>2</sup>, Chan Hee Lee<sup>3,4</sup>, Chihaya Adachi<sup>3,4</sup>, Sae Youn Lee<sup>2</sup> (1. Department of Advanced Battery Convergene Engineering, Dongguk Univ. (Korea), 2. Department of Energy and Materials Engineering, Dongguk Univ. (Korea), 3. Center for Organic Photonics and Electronics Research (OPERA), Kyushu Univ. (Japan), 4. Department of Chemistry and Biochemistry, Kyushu Univ. (Japan))

**[P25-146]** Selective Synthesis of Visible and Near-Infrared Emitting Calcium-Lanthanide-Thiacalixarene Complexes

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