

Poster session  
May 21 (Mon) 18:00-19:30  
(odd number 18:00-18:45    even number 18:45-19:30)

- PM01 One and multiple photon induced generation and stabilization of multi-excitons in quantum dot superlattices  
Biju V. Pillai (Hokkaido Univ.)
- PM02 Plasmon-associated control of chemical reaction at nanometer scale  
Hiroshi Uji-i (RIES, Hokkaido Univ. and KU Leuven)
- PM03 Modulations of electronic states in plasmonic strong coupling systems and their application to photochemical reaction fields  
Kosei Ueno (Hokkaido Univ.)
- PM04 Two-photon excitation of optically-forbidden transition using nanostructure and entangled photons  
Hisaki Oka (Niigata Univ.)
- PM05 Development of Novel Electrochemical Reactions with Non-linear Photoresponse of Quantum Dots  
Tsukasa Torimoto (Nagoya Univ.)
- PM06 Highly efficient up-conversion nanocrystals driven by cooperative IR-excitation  
Masanori Sakamoto (Kyoto Univ.)
- PM07 Advancing electronic structure theory for high accuracy prediction of higher excited states and its application to photochromic molecules  
Takeshi Yanai (Nagoya Univ.)
- PM08 Cooperative molecular alignment process enabled by spatio-temporally dynamic lighting  
Atsushi Shishido (Tokyo Tech.)
- PM09 Functional Photoactive Materials Based on Flexible  $\pi$  Molecules  
Shohei Saito (Kyoto Univ.)
- PM10 Molecular design for aggregation induced emission enhancement from view of vibronic couplings  
Tohru Sato (Kyoto Univ.)
- PM11 Effectual Photon Upconversion through the Toroidal Interaction  
Tadashi Mori (Osaka Univ.)
- PM12 Development of highly sensitive fluorescence photoswitching systems by the giant amplification of nonlinear fluorescence quenching efficiency  
Tsuyoshi Fukaminato (Kumamoto Univ.)
- PM13 Development of Novel Excited-State Dynamics Based on Synergistic Functionalities of Organic-Inorganic Hybrid Molecular Assemblies

- Taku Hasobe (Keio Univ.)
- PM14 Development of Photoresponsive Solid-liquid Phase Transition Systems Based on Synergetic Action of Molecules  
Yasuo Norikane (AIST)
- PM15 Investigation into Interplay of Reversible Photoisomerization and Structural Phase Transition in the Self-Oscillatory Flipping of Molecular Assemblies  
Yoshiyuki Kageyama (Hokkaido Univ.)
- PM16 Elucidation of photoinduced phase transition in charge-transfer complex nanocrystals  
Tsunenobu Onodera (Tohoku Univ.)
- PM17 Elucidation of photoinduced phase transition in charge-transfer complex nanocrystals  
Fuyuki Ito (Shinshu Univ.)
- PM18 Construction of hierarchical and cooperative fluorescence modulation molecular systems based on the meso-macro structural formation  
Takehisa Dewa (Nagoya Institute of Technology)
- PM19 Ultrafast Energy Transfer of Biohybrid Photosynthetic Antenna Complexes in Molecular Assembly Systems  
Tomiki Ikeda (Chuo Univ.)
- PM20 Development of Advanced Photoresponsive Molecular Systems for Super-Resolution Fluorescence Microscopy  
Masakazu Morimoto (Rikkyo Univ.)
- PM21 Crystallization control of the photoresponsible diarylethene film with a plasmonic chip  
Keiko Tawa (Kwansei Gakuin Univ.)
- P01 Energy Transfer and Annihilation Dynamics of Photosystem II Monomer and Dimer  
Yusuke Yoneda, Tetsuro Katayama, Yutaka Nagasawa, Hiroshi Miyasaka, Yasufumi Umena (Osaka Univ.)
- P02 Photoinduced Shape Changes of Molecular Glass Particles of Azobenzene-based Photochromic Amorphous Molecular Materials Fixed in Agar Gel  
Hideyuki Nakano (Muroran Institute of Technology)
- P03 Valence Photoisomerization between Quinoidal and Biradical Forms of Photochromic Molecule  
Ayako Tokunaga, Katsuya Mutoh, Jiro Abe (Aoyama Gakuin Univ.)
- P04 Stepwise Two-Photon-Induced Photochromism of Bisnaphthopyrans Exhibiting Excitation Intensity-Dependent Color Change  
Yuki Inagaki, Katsuya Mutoh, Jiro Abe (Aoyama Gakuin Univ.)

- P05 Hexa-*peri*-hexabenz[7]helicene: Precise Synthesis of a Primary Substructure of Helically Twisted Chiral Graphenes  
Yusuke Nakakuki, Takashi Hirose, Kenji Matsuda (Kyoto Univ.), Hikaru Sotome, Hiroshi Miyasaka (Osaka Univ.)
- P06 First Definitive Identification of Intact Organic Pentacation Radical  
Akihiro Kitashoji, Tomoyuki Yatsuhashi (Osaka City Univ.)
- P07 Solid-State NIR-to-Visible Triplet-Triplet Annihilation Upconversion with Low Threshold Excitation Intensity  
Aizitiali Abulikemu, Yusuke Sakagami, Kenji Kamada (AIST), Daiki Kuzuhara (Iwate Univ.), Hiroko Yamada (NAIST)
- P08 Theoretical Study on Nonlinear Optical Properties for Triplet Pair States of Pentacene Dimers Induced by Singlet Fission  
Takayoshi Tonami, Takanori Nagami, Kenji Okada, Masayoshi Nakano (Osaka Univ.)
- P09 Flapping Photoactive Molecules: Singlet Fission and Mechanophore Compression  
Takuya Yamakado, Kazuya Watanabe, Kazuya Otsubo, Shohei Saito (Kyoto Univ.)
- P10 Theoretical Analysis on Triplet-Triplet Annihilation-Based Photon Upconversion Mechanism of 9,10-Diphenylanthracene Derivatives  
Yasuteru Shigeta (Tsukuba Univ.), Ryuma Sato (RIKEN)
- P11 Photochemical Properties of Fast Negative Photochromic Molecule with Fluorene Units  
Kaho Arai, Ayako Tokunaga, Katsuya Mutoh, Jiro Abe (Aoyama Gakuin Univ.)
- P12 Theoretical Study of Absorption and Emission Energies of *fac*-Ir(ppy)<sub>3</sub> Complexes: Quantum Chemical Design Guidelines for Color Tuning  
Yasutaka Kitagawa, Yoshiki Natori, Shogo Aoki, Rena Teramoto, Hayato Tada, Iori Era, Masayoshi Nakano (Osaka Univ.)
- P13 Coherent wavepacket motions accompanying ultrafast charge separation  
Yutaka Nagasawa (Ritsumeikan Univ.)
- P14 Fluorescence characteristics of ZnS-AgInS<sub>2</sub> (Z AIS) nanoparticles on the bull's eye plamonic chip  
Wataru Minoshima, Eri Nakamura, Keiko Tawa (Kwansei Gakuin Univ.)  
Takayuki Takiyama, Tatsuya Kameyama, Tsukasa Torimoto (Nagoya Univ.)
- P15 Photon upconversion of phosphorescence dye loaded on the surface of nano-porous glass  
Toshiko Mizokuro<sup>1</sup>, Aizitiali Abulikemu<sup>1</sup>, Kengo Suzuki,<sup>2</sup> Yusuke Sakagami<sup>1,3</sup>, Ritsuki Nishii<sup>1,3</sup>, Tetsuro Jin<sup>1</sup>, Kenji Kamada<sup>1,3</sup>  
(AIST<sup>1</sup>, Hamamatsu Photonics<sup>2</sup>, Kwansei Gakuin Univ.<sup>3</sup>)

- P16 Rational Molecular Design for Fast Photoswitchable Naphthopyrans  
Hayato Kuroiwa, Yuki Inagaki, Katsuya Mutoh, Jiro Abe (Aoyama Gakuin Univ.)
- P17 Theoretical Study on Singlet Fission in Terrylenes from Vibronic Coupling Density Analysis  
Takanori Nagami (Osaka Univ.), Soichi Ito (Institute for Molecular Science), Takayoshi Tonami, Kenji Okada, Masayoshi Nakano (Osaka Univ.)
- P18 Photochromic performance of 4-heteroaryl-5-vinyl-2-phenylthiazole derivatives  
Shizuka Takami (NIT. Niihama College), Tadatsugu Yamaguchi (Hyogo Univ.), Tsuyoshi Kawai (Nara Inst. Sci. Tech.)
- P19 Multicolor Fluorescence Photoswitching based on the Giant Amplification of Fluorescence Quenching in Photochromic Nanoparticles  
Sanae Ishida, Tsuyoshi Fukaminato (Kumamoto Univ.)
- P20 Supramolecular Coassembly of Quantum Dot and Perylene Bisimide Dye  
Mitsuaki Yamauchi, Sadahiro Masuo (Kwansei Gakuin Univ.)
- P21 Nucleation/deposition mechanism of Mg-vapor atoms on colorless diarylethene surface with a low glass-transition temperature  
Ikumi Takemoto, Tsuyoshi Tsujioka (Osaka Kyoiku Univ.)
- P22 Multi-color Fluorescence Modulation of a Spiro-functionalized Diarylethene  
Tetsuya Nakagawa, Yosuke Miyasaka, Yasushi Yokoyama (Yokohama National Univ.)
- P23 Maintenance and Inversion of Axial Chirality in  $6\pi$  Electrocyclization of Binaphthyl Compounds  
Takashi Ubukata (Yokohama National Univ.)
- P24 Direct Observation of Hot Carrier Dynamics in an Organic - Inorganic Perovskite Crystal by Femtosecond Transient Absorption Microscopy  
Tetsuro Katayama, Naoto Tamai (Kwansei Gakuin Univ.)
- P25 Ratiometric Mechanophores for Evaluating Stress Concentration of Polyurethane  
Ryota Kotani, Shohei Saito (Kyoto Univ.)
- P26 Intensity-Dependent Color Change of Stepwise Photochromic Diacetylene-Linked Bisnaphthopyran  
Masayuki Ito, Katsuya Mutoh, Jiro Abe (Aoyama Gakuin Univ.)
- P27 Nitrogen-embedded Flapping Fluorophore  
Ryo Achiwa · Shohei Saito (Kyoto Univ.)
- P28 Stepwise Two-Photon Induced Electron Transfer from Higher Excited States of Non-Covalently Bound Porphyrin-CdS/ZnS Core/Shell Nanocrystals  
Yoichi Kobayashi, Takuma Uno (Ritsumeikan Univ.), Masashi Koga, Hikaru Sotome, Hiroshi Miyasaka (Osaka Univ.), Naoto Tamai (Kwansei Gakuin Univ.)
- P29 Excited-state relaxation dynamics of copper phthalocyanine nanorods revealed

- by femtosecond single-particle spectroscopy.  
Yukihide Ishibashi, Tsuyoshi Asahi (Ehime Univ.)
- P30 Molecular Structures and Dynamics of Photoresponsive Systems Revealed by Time-Resolved Vibrational and Vibrational Optical Activity Spectroscopies  
Akira Sakamoto, Hajime Okajima, Jiro Abe (Aoyama Gakuin Univ.)
- P31 Structural analysis of the dipeptide and tripeptide to design photo-responsive self-assembled peptide materials  
Izuru Kawamura (Yokohama Natl. Univ.)
- P32 Two-Photon Cycloreversion Reaction of a Fluorescent Diarylethene Derivative at Higher Excited States  
Tatsuhiro Nagasaka, Hikaru Sotome (Osaka Univ.), Masakazu Morimoto, Masahiro Irie, Hiroshi Miyasaka (Osaka Univ.)
- P33 Observation of Photoionization Dynamics of a Phenylenediamine Derivative in Solution Phase induced by Multiphoton Excitation  
Masafumi Koga, Yusuke Yoneda, Hikaru Sotmome, Hiroshi Miyasaka (Osaka Univ.)
- P34 Synthesis and investigation of photochromic-fluorescent nanosystems  
Nicolas Fabre, Rémi Métivier (PPSM, ENS Paris-Saclay)
- P35 Chemometric modelling of advanced fluorescence imaging data: some case-studies  
Raffaele Vitale<sup>1,2</sup>, Siewert Hugelier<sup>1</sup>, Mai Trang Do<sup>1</sup>, Michel Sliwa<sup>1</sup>, Cyril Ruckebusch<sup>1</sup> (<sup>1</sup>Université de Lille, <sup>2</sup>Katholieke Universiteit Leuven)
- P36 Unconventional isomerization photokinetics and fluorescence photoswitching in multiphotochromic saccharides  
Stéphane Maisonneuve<sup>1</sup>, Rémi Métivier<sup>1</sup>, Pei Yu<sup>2</sup>, Kenji Higashiguchi<sup>3</sup>, Kenji Matsuda<sup>3</sup>, Juan Xie<sup>1</sup> (<sup>1</sup>Université Paris-Saclay, <sup>2</sup>Université Paris-Sud 11, <sup>3</sup>Kyoto University)
- P37 Chemometrics applied to super-resolution fluorescence microscopy imaging  
Siewert Hugelier<sup>1</sup>, Michel Sliwa<sup>1</sup>, Peter Dedecker<sup>2</sup>, Paul Eilers<sup>3</sup>, Cyril Ruckebusch<sup>1</sup> (<sup>1</sup>LASIR, <sup>2</sup>KU Leuven, <sup>3</sup>Erasmus MC)