Poster Sessions

------ July 29, 2024（Monday）18:10-20:10　Room A -------

- from 18:10 to 19:10 (for presenters given an odd number)
- from 19:10 to 20:10 (for presenters given an even number)

1P-01

*__Shikai Chen__[1], Keita Tosa[1], Yusheng Li[1], Shuzi Hayase[1], Qing Shen[1] *(1.The University of Electro-Communications)*

Synthesis and Light-Emitting Diode Application of Sb^{3+}/Mn^{2+} Co-Doped with Stable and High Photoluminescence Quantum Yield of $Cs_2NaInCl_6$

1P-02

***Sujun Ji**[1], Feng Liu[2], Shuzi Hayase[1], Qing Shen[1] *(1.The University of Electro-Communications, 2. Shandong University)*

Highly Luminescent Phase-Stable Hybrid Manganese Halides for Efficient X-Ray Imaging

1P-03

***Yu Zhe Johnson Wu**[1], Wenjea Jack Tseng[1] *(1.National Chung Hsing University)*

Effect of Sulfidation Temperature on Preparation of ZnO@ZnS Core-Shell Nanorod Arrays for Enhanced Photocurrent Density and supercapacitor Properties

1P-04

***Marina Doi**[1], Haonan Liu[1], Shinji Ando[1] *(1.Tokyo Tech.)*

Diffusion Behavior of Gas Molecules Monitored by the Phosphorescence Processes of Imide Compound Dispersed in Polymer Matrix at Lower Temperatures

1P-05

***Ayuna Nishiyama**[1], Yuki Nagai[1], Yoshinori Okayasu[1], Yoichi Kobayashi[1, 2] *(1.Ritsumeikan University, 2.PRESTO JST)*

Two-step photoreduction of anthraquinone derivatives in polysaccharide gels

1P-06

***Masbooth Rasa Melechalil**[1], Tetsuya Shimada[1], Tamao Ishida[1], Shinsuke Takagi[1] *(1.Tokyo Metropolitan University)*

Adsorption Behavior and Electron Injection Efficiencies of Metalloporphyrins on the Titania Nanosheets

1P-07

***Kengo Nagatsuka**[1], Yuichi Yamaguchi[1, 2], Akihiko Kudo[1, 2] *(1.Tokyo University of Science, 2.CVRC, RIST TUS)*

CO_2 Reduction for Green Syngas Production in an Aqueous Media Using a Photoelectrochemical Cell Utilizing a Black Cu_3VS_4 Photocathode

1P-08

***Masaya Yara[1]**, Teruyuki Honda[1], Takumi Ehara[1], Kiyoshi Miyata[1], Yan Xin[1], Hironobu Ozawa[1], Ken Sakai[1], Ken Onda[1] *(1. Kyushu University)*

Real-time observation of electron transfer in TiO_2 photoanode modified with molecular ruthenium complexes anchored by pyridine ligands

1P-09

***Makoto Tozawa[1]**, Chie Miyamae[1], Kazutaka Akiyoshi[1], Tatsuya Kameyama[1], Genichi Motomura[2], Yoshihide Fujisaki[2], Taro Uematsu[3], Susumu Kuwabata[3], Tsukasa Torimoto[1] *(1. Nagoya University, 2. NHK STRL, 3. Osaka University)*

Enhanced Luminescence of Ag-In-Ga-S Nanocrystals Embedded in Ga_2O_3 Matrix by Na^+ Doping for Light-Emitting Diodes

1P-10

***Rizki Marcony Marcony Surya[1]**, Surya Pratap Singh[1], Takuya Okazaki[1], Kosuke Beppu[1], Fumiaki Amano[1] *(1.Tokyo Metropolitan University)*

Cuprous Oxide Photocathode Stability via Nitrate Reduction Reaction

1P-11

***Yuki Goya[1]**, Ken Sakai[1], Hironobu Ozawa[1] *(1.Kyushu University)*

A Molecular-Based Photoelectrochemical Cell for Soar-Driven CO_2 Reduction Consisting of Two Mesoporous TiO_2 Electrodes

1P-12

***Yung-Chung Chen[1]**, Shih-Chieh Yen[1], Jen-Shyang Ni[1] *(1 National Kaohsiung University of Science and Technology)*

The preparation of one-component Type II visible-light-absorbing chalcones containing fused aromatic rings and their free radical photopolymerization properties

1P-13

Naoki Sugihara[1], ***Masayuki Abe[1]**, Yoshihiro Nishimoto[1], Makoto Yasuda[1] *(1.Osaka University)*

Defluoroheteroarylation of Trifluoromethylarenes with Heteroarenes by Photoredox Catalysts and Organostannanes

1P-14

***Ryuichi Nakada[1]**, Toshiya Tanaka[1], Megumi Okazaki[1], Kazuhiko Maeda[1] *(1.Tokyo Tech.)*

Light-intensity dependence of CO_2 reduction over Ru-complex/Ag/polymeric carbon nitride hybrid photocatalysts

1P-15

***Natsumi Yano[1]**, Yusuke Kataoka[1] (*1.Shimane University)*

Dimer-of-Dimers type tetranuclear rhodium complex catalyst for electrochemical and photochemical hydrogen evolution

1P-16

***Arno Raes[1]**, Sammy W. Verbruggen[1] *(1.University of Antwerp)*

Ultrasound-driven crystallization of amorphous TiO_2 for photocatalysis

1P-17

***Hisanao Usami[1]**, Honoka Shima[1] *(1.Shinshu University)*

Preparation and photocatalytic properties of crosslinked-1,2,4,5-tetrahydroxybenzene for hydrogen peroxide generation

1P-18

***Hiroyuki Takeda[1]**, Natsumi Hirosaka[1], Taiyo Kobayashi[1], Motoko S. Asano[1] *(1.Gunma University)*

Visible-Light Absorption of Heteroleptic Cu(I) Complexes Bearing 5-Membered Heteroaryls for Redox Photosensitizer

1P-19

***Natsuki Suto[1]**, Yuichi Yamaguchi[1, 2], Akihiko Kudo[1, 2] (*1.Tokyo University of Science, 2.CVRC, RIST TUS)*

Single particulate $ANbO_3$:Ir,Zr (A = K, Na) photocatalysts synthesized by various methods for water splitting under visible light irradiation

1P-20

***Shin-ichi Sasaki[1]**, Yanxiang Liu[2], Ritsuko Fujii[3], Xiao-Feng Wang[2] *(1.Nagahama Inst. Bio-Sci. Tech., 2.Jilin University, 3.Osaka Metropolitan University)*

Carotenoid@Ti_3C_2Tx nanocomposites for photocatalytic hydrogen evolution

1P-21

***DongSeb Lee[1]**, Kosei Yamauchi[1], Ken Sakai[1] *(1.Kyushu University)*

Enhanced Formate Selectivity and Suppressed Hydrogen Evolution in Rhodium-Based Photocatalytic CO_2 Reduction via Hydroxyl-Functionalized bpy Ligands

1P-22

***Merlin Lukas Gutgesell[1]**, Julian Klein[2], Shuoping Ding[3], Gerd Bacher[2], Jennifer Strunk[1] (*1.Tech. University Munich (TUM), 2.University Duisburg-Essen, 3.Leibniz-Inst. for Cat. (LIKAT))*

Rutilization of TiO_2 Anatase by Plasmonic Heating through Au Nanoparticles

1P-23

***Masanori Kodera[1]**, Kazuhiro Sayama[1] *(1.AIST)*

Machine learning-assisted prediction of nitridation process of Ta_2O_5 to TaON and their photocatalytic oxygen evolution properties

1P-24

***Yudai Furuta[1]**, Hajime Suzuki[1], Osamu Tomita[1], Akinobu Nakada[1], Akinori Saeki[2], Ryu Abe[1] *(1.Kyoto University, 2.Osaka University)*

Controlling Carrier Dynamics of Bi-based Oxyhalide Photocatalysts via Introduction of Lanthanide Ions

1P-25

***Hikari Suzuki[1]**, Yusuke Kinoshita[1], Ayumi Ishii[1] *(1.Waseda University)*

Chiroptical Control in One-dimensional Helical Structure of Perovskite Crystalline Films

1P-26

***Yasutaka Soga[1]**, Hajime Suzuki[1], Osamu Tomita[1], Akinobu Nakada[1], Ryu Abe[1] *(1.Kyoto University).*

Particle Morphology Control of a Layered Oxyhalide Photocatalyst Toward Efficient Water Splitting Under Visible Light

1P-27

***Eri Sakuda[1]**, Ryo Fukumoto[1], Yuuki Hommura[1], Kenichiro Omoto[1], Yasuhiro Arikawa[1], Keisuke Umakoshi[1] *(1.Nagasaki University)*

Photoreduction Reaction of CO_2 Using Cyclometalated Iridium(III) Complexes Having Arylborane Units

1P-28

***Takumi Okada[1, 2]**, Masanori Kodera[1], Yugo Miseki[1], Hitoshi Kusama[1], Takahiro Gunji[2], Kazuhiro Sayama[1, 2] *(1.AIST, 2.Tokyo University of Science)*

Simultaneous production of hydrogen and chlorine through overall brine splitting with Pt-loaded TiO_2

1P-29

***Ryota Komatsuzaki[1]**, Yusuke Kinoshita[1], Ayumi Ishii[1] *(1.Waseda University)*

Development of Lanthanide-based Up-conversion Hybrid Materials for NIR Light-activated Photochemical Reaction

1P-30

***Koshiro Chiwata[1]**, Kosei Yamauchi[1], Ken Sakai[1] *(1.Kyushu University)*

Electron-accumulating Dinuclear Co-NHC Catalyst for CO_2 Reduction

1P-31

***Mai Takashima[1]**, Bunsho Ohtani[2], Ryoji Asahi[1] *(1.Nagoya University, 2.touche NPO)*

Prediction of photocatalytic activity by energy-resolved distribution of electron traps

1P-32

***Linh Tran Bao Nguyen[1]**, Manabu Abe[1] *(1.Hiroshima University)*

Study on factors affecting uncaging quantum yield for the design of improved *ortho*-nitrobenzyl photoremovable protecting groups

1P-33

Cancellation

1P-34

***Napasuda Wichaiyo[1]**, Yuyao Wei[1], Chao Ding[2], Sayuri Kaneko[1], Shuzi Hayase[1], Qing Shen[1] *(1.The University of Electro-Communications, 2.Sichuan University)*

Synthesis, Optical and Electrical Properties of Colloidal P-type PbS Quantum Dots for Solar Cell Applications

1P-35

***Boyu Zhang[1]**, Shuzi Hayase[1], Qing Shen[1] *(1.The University of Electro-Communications)*

Suppressing Auger recombination by controlling the interface of core-shell quantum dots for high efficiency quantum dot-based solar cells

1P-36

***Samy Almosni[1]**, Hiroshi Segawa[1] *(1.The University of Tokyo)*

Volatile solvent system for quenching-free perovskite processing

1P-37

***Chao Yang Lin[1]**, Heng Lu[2], Xiaowei Zhan[2], Kai Chen[1, 3, 4] *(1.RRI, Faculty of Engineering, VUW, 2.SMSE, Peking Univ, 3.MacDiarmid Institute for Advanced Materials and Nanotechnology, 4.The Dodd-Walls Centre for Photonic and Quantum Technologies)*

Ultrafast photophysics in ternary system of organic solar cell material

1P-38

***Ryo Fukasawa[1]**, Toru Asahi[1], Takuya Taniguchi[1] *(1.Waseda University)*

Effectiveness and limitation of the performance prediction of perovskite solar cells by process informatics

1P-39

***Shafna Kunnathum Peedika[1]**, Wei Tzu Chien[1] *(1.NTHU)*

A new approach for the fabrication of perovskite solar cells by mixing of perovskite single crystals

1P-40

***Wentao Zhang[1]**, Kazutaka Akiyoshi[1], Tatsuya Kameyama[1], Tsukasa Torimoto[1] *(1.Nagoya University)*

Tailoring Photoelectrochemical Properties of Ag-Bi-S Quantum Dots through Size and Composition

1P-41

***Xiaoxiao Mi[1]**, Koichi Tamaki[1], Haibin Wang[1], Takaya Kubo[1], Hiroshi Segawa[1] *(1.The University of Tokyo)*

PbS quantum dot/ZnO heterointerface modification using small organic molecules with different tailor groups for high-efficiency infrared solar cell

1P-42

***Phuong Ha Thi Ngo[1]**, Tzu-chien Wei[1], Vinh Son Nguyen[1] *(1.National Tsing Hua University)*

Electrodeposited Zn-doped TiO_2 Mesoporous Electron Transporting Layer For Efficient Perovskite Solar Cells

1P-43

***Farghally Abdelraheem Farghally[1]**, Tsung Chein Zu Lee[2], Chen Yu Yeh[2], Tzu Chien Wei[1] *(1.National Tsing Hua University, 2.National Chung Hsing University)*

Rational Molecular Engineering of Porphyrins for Enhanced Performance in Dye-Sensitized Solar Cells

1P-44

***Hao Yang[1]**, Licheng Sun[1, 2] *(1.KTH, 2.Westlake University)*

Decoupled water nucleophilic attack pathway by a polymeric water oxidation catalyst with single nickel sites

1P-45

***Toma Kunikubo[1]**, Muralee Murugesu[2], Jaclyn Brusso[2], Kosei Yamauchi[1], Hironobu Ozawa[1], Ken Sakai[1] *(1.Kyushu University, 2.Ottawa University)*

A Highly Durable Dinuclear Platinum(II) Molecular Photocatalyst Promoting Red-Light-Driven Hydrogen Production From Water

1P-46

***Shu Ashimura[1]**, Outa Mori[1], Reiya Konaka[1], Masaaki Yoshida[1] *(1.Yamaguchi University)*

Observation of excited carrier transfer from TiO_2 photocatalyst powder to metal nanoparticle cocatalyst using in-situ ATR-SEIRAS measurement.

1P-47

***Masanori Kan[1]**, Kosei Yamauchi[1], Ken Sakai[1] *(1.Kyushu University)*

Estimating Turnover Frequency in Electrochemical Hydrogen Evolution from Water Catalyzed by a Co-NHC Complex

1P-48

***Kyosuke Yamada[1]**, Yutaka Amao *(1.Osaka Metropolitan University)*

Visible-light driven L-alanine production from pyruvate and ammonia using photo/biocatalyst system

1P-49

***Shintaro Yoshikawa[1]**, Yutaka Amao[1] *(1.Osaka Metropolitan University)*

Visible light responsive hydrogen production based on formate decomposition using the enzyme and platinum nanoparticles in neutral pH region

1P-50

***Anuja Arun Yadav[1]**, M. M. Islam[1], Takeaki Sakurai[1], S.-W. Kang[2] *(1.University of Tsukuba, 2.Yeungnum University)*

Enhanced Electrochemical Performance of Nitrogen-Doped Carbon dot/$MnMoO_4$ Composites for energy storage Applications

1P-51

***Masahiro Tomomune[1]**, Masaaki Yoshida[1] *(1.Yamaguchi University)*

Development of Water Splitting catalyst Using Manganese Nodule and Elucidation of Catalytic Function by Operando XAFS Measurements

1P-52

***Xue Zhang[1]**, Jianzhang Zhao[1] *(1.Dalian University of Technology)*

A new discovery on the spatial distribution of triplet state in molecules with large π-conjugated systems

1P-53

***Xi Chen[1]**, Jianzhang Zhao[1] *(1.Dalian University of Technology)*

Long-Lived Charge-Transfer State in Spiro Compact Electron Donor–Acceptor Dyads Based on Pyromellitimide-Derived Rhodamine: Charge Transfer Dynamics and Electron Spin Polarization

1P-54

***Hajime Shigemitsu[1]**, Aya Yoshikawa[1], Yuya Imuro[1], Toshiyuki Kida[1] *(1.Osaka University)*

Photocatalytic Activity Induced by Self-assemblies of Ionic Organic Dyes and the Applications for Artificial Photosynthesis

1P-55

***Toshihiro Takashima[1]**, Takumi Mochida[1], Hikaru Fukasawa[1], Hiroshi Irie[1] *(1.University of Yamanashi)*

Electrochemical nitrogen fixation using defect-engineered iron oxides

1P-56

***Tsuyoshi Kawai[1, 2]**, Ryosuke Asato[1, 2, 3, 6], Takuya Nakashima[4], Ryuta Imai[1], Mihoko Yamada[1], Colin Martin[1, 2, 5], Gwenael Rapenne[1, 2, 6] *(1.NAIST, 2.NAIST-CEME, 3.Mitsubishi Chemical Corporation, 4.Osaka Metropolitan University, 5.Tokyo Tech., 6.Université de Toulouse, CNRS)*

Efficient Isomerization Reactions of Photochromic Terarylenesand Photoenergy Storage Capability

1P-57

***Tatsuki Morimoto[1]**, Sakiho Kihara[1], Hiroki Shimoji[1] *(1.Tokyo University of Technology)*

Anion-Accelerated Photocatalytic Reduction of Carbon Dioxide using a boron complex

------ July 30, 2024（Monday）18:10-20:10　Room A -------

- from 18:10 to 19:10 (for presenters given an odd number)
- from 19:10 to 20:10 (for presenters given an even number)

2P-01
***Shinya Moribe[1]**, Yasuhiko Takeda[1], Mitsutaro Umehara[1], Jiaju Ma[1], Yuri Yamada[1], Minoru Hirano[1] *(1.TOYOTA CENTRAL R&D LABS., INC.)*
Transient photocurrent response of porphyrin-zirconium metal-organic framework electrodes in photoelectrochemical reactions

2P-02
***Alexandru George Dumitrascu[1]**, Laureline Lecarme[1], Jean-Claude Lepretre[1] *(1.Grenoble INP)*
Photo-assisted recharge of Lithium Ion Battery

2P-03
***Jigar Shaileshkumar Halpati[1]**, Aravind Kumar Chandiran[1] *(1.Indian Institute of Technology Madras)*
Mixed tetravalent vacancy ordered halide double perovskites for enhanced solar water oxidation.

2P-04
***Wei-Yin Sun[1]** *(1.Nanjing University)*
Copper frameworks with tetraphenylethene-imidazole ligand for photo/electrocatalytic carbon dioxide reduction

2P-05
***Kazutaka Akiyoshi[1]**, Mariko Hasegawa[1], Chie Miyamae[1], Tatsuya Kameyama[1], Hiroki Sato[2], Yusuke Ohshima[2], Tsukasa Torimoto[1] *(1.Nagoya University, 2.TANAKA KIKINZOKU KOGYO K.K.)*
Facile Solution-Phase Synthesis of Ag-Au-S Quantum Dots with Near-Infrared Photoluminescence

2P-06
***Ryusuke Mizoguchi[1]**, Behera Truptimayee[2], Ayumi Ishii[2] *(1.Teikyo University of Science, 2.Waseda University)*
Lanthanide-based Up-conversion Hybrid Materials with Multicolor Luminescence

2P-07
***Mir Ferdous Chowdhury[1]**, Fumiaki Amano[1] *(1.Tokyo Metropolitan University)*
Electrochemical self-doping in TiO_2 nanotubes for enhanced photoelectrochemical degradation of organic dye

2P-08
***Mizuki Noto[1]**, Ayumi Ishii[2] *(1.Teikyo University of Science, 2.Waseda University)*
Quantum-cutting induced near-infrared luminescence in Yb^{3+}-doped lead halide perovskite single crystals

2P-09

***Minori Ishihara[1]**, Tomoya Oshikiri[1, 2], Xu Shi[1], Hiroaki Misawa[1, 3, 4] *(1.Hokkaido University, 2.Tohoku University, 3.Okayama University, 4.National Yang Ming Chiao Tung University)*

Hot-electron transfer on photoanode with multilayer gold nanoparticles under strong coupling between plasmon and Fabry-Pérot nanocavity

2P-10

***Ren Itagaki[1, 2]**, Akinobu Nakada[1, 3], Hajime Suzuki[1], Osamu Tomita[1], Ryu Abe[1] *(1.Kyoto University, 2.JSPS Research Fellow DC1, 3.PRESTO/JST)*

Photoredox Catalysis Harnessing Water as an Electron Source with Phase-Migrating Electron Mediators in a Biphasic Solution

2P-11

***Hiroto Ueki[1]**, Shuji Anabuki[2], Megumi Okazaki[1], Kenta Aihara[1], Fumitaka Ishiwari[3], Akinori Saeki[3], Akira Yamakata[2], Kazuhiko Maeda[1] *(1.Tokyo Tech., 2.Okayama University, 3.Osaka University)*

Improved activity of a particulate Pb-Ti oxyfluoride photocatalyst by particle size reduction

2P-12

***Kei Kamogawa[1]**, Yuki Kato[2], Yuushi Shimoda[3], Kiyoshi Miyata[3], Ken Onda[3], Takumi Noguchi[2], Yusuke Tamaki[4], Osamu Ishitani[5] *(1.Tokyo Tech., 2.Nagoya University, 3.Kyushu University, 4.AIST, 5.Hiroshima University)*

Improvement of Ru(II)-Re(I) Supramolecular Photocatalysts Based on Mechanistic Study

2P-13

***Riku Nakao[1]**, Kotaro Wada[1], Kengo Nagatsuka[1], Yuichi Yamaguchi[1, 2], Akihiko Kudo[1, 2] *(1.Tokyo University of Science, 2.CVRC, RIST TUS)*

Development of Z-schematic Photocatalyst Systems for Water Splitting using Long Wavelength Visible Light-Responsive Metal Sulfides Prepared by a Flux Method

2P-14

***Tomoomi Miyashita[1]**, Shunya Yoshino[1], Makoto Kobayashi[2], Hideki Kato *(1.Tohoku University 2.Nagoya University)*

Modification of Fe_2O_3 photocatalyst for application to Z-scheme water splitting

2P-15

***Shunsuke Kobashi[1]**, Yoshinori Okayasu[1], Yuki Nagai[1], Yoichi Kobayashi[1, 2] *(1.Ritsumeikan University, 2.PRESTO JST)*

Optical Properties and Photostability of Water-Soluble Europium(III) Complex Nanoparticles

2P-16

***Waka Matsuo[1]**, Daisuke Yoshioka[1], Yoshinori Okayasu[1], Yuki Nagai[1], Yoichi Kobayashi[1, 2] *(1.Ritsumeikan University, 2.PRESTO JST)*

Photoinduced Ligand Displacement in Zinc Sulfide Nanorods

2P-17

***Sota Tokuoka[1]**, Daisuke Yoshioka[1], Yuki Nagai[1], Yoshinori Okayasu[1], Yoichi Kobayashi[1, 2] *(1.Ritsumeikan University, 2.PRESTO, JST)*

Photoinduced emission color change and ligands dependence of Cadmium Sulfide nanoplatelets under UV irradiation

2P-18

***Tomoya Ota[1]**, Shigeru Ikeda[1] *(1.Konan University)*

Calcium titanate co-doped with rhodium, antimony, and magnesium as a visible light responsive photocatalyst for hydrogen evolution

2P-19

***Yuan Zhong[1]**, Akira Yamamoto[1], Hisao Yoshida[1] *(1.Kyoto University)*

Nonoxidative coupling of methane on Pd-Bi/KTO photocatalyst

2P-20

***Naoki Hosokawa[1, 3]**, Yusuke Tamaki[2], Osamu Ishitani[3] *(1.Tokyo Tech., 2.AIST, 3.Hiroshima University)*

Factors determining formation quantum yields of photochemical reduced species

2P-21

***Mayu Yuasa[1]**, Yohei Kametani[1], Yoshihito Shiota[1], Yu Hoshino[1], Hisashi Shimakoshi[1] *(1. Kyushu University)*

Visible Light-driven Photocatalytic Synthesis of *N*-Formamides Only from Amines and Air

2P-22

***Thomas Douglas Small[1]**, Cameron Shearer[1], Gregory Metha[1], Yideng Shen[1] *(1.The University of Adelaide)*

Fabricating visible light acative photocatalysts for enhanced hydrogen production

2P-23

***Yideng Shen[1]**, Thomas D. Small[1], Cameron J. Shearer[1], Gregory F. Metha[1] *(1.University of Adelaide)*

Improving $BiVO_4$ as OEP for Z-scheme photocatalyst

2P-24

***Hideya Tsuchikado[1]**, Yuta Shiroma[1], Dongxiao Fan[2], Megumi Okazaki[1], Fumitaka Ishiwari[3], Shunsuke Nozawa[2], Akira Yamakata[4], Akinori Saeki[3], Kazuhiko Maeda[1] *(1.Tokyo Tech., 2.High Energy Accelerator Research Organization, 3.Osaka University, 4.Okayama University)*

Development of Cation-Doped Layered Perovskite Oxynitride $K_2LaTa_2O_6N$ Photocatalyst for Efficient Hydrogen Evolution

2P-25

***Hiroki Iwaizumi[1]**, Yasutaka Kitahama[1], Vikas Nandal[2], Kazuhiko Seki[2], Toshio Hayashi[3, 4], Akihiko Kudo[5, 6], Hiroyuki Matsuzaki[1], Kazunari Domen[7, 8] *(1.Research Institute for Material and Chemical Measurement, AIST, 2.Global Zero Emission Research Center, AIST, 3.ARPChem, 4.Mitsui Chemicals, Incorporated, 5.Tokyo University of Science, 6.Research Institute of Science & Technology, 7.Shinshu University, 8.The University of Tokyo)*

Unveiling photogenerated carrier dynamics in visible-light absorbing $SnNb_2O_6$ by transient absorption spectroscopy

2P-26

***Takuya Yokoo[1]**, Eri Sakuda[1], Kenichiro Omoto[1], Yasuhiro Arikawa[1], Keisuke Umakoshi[1] *(1.Nagasaki University)*

Synthesis and Photophysical Properties of Ruthenium (II) Complexes with Planar Boron Ligand

2P-27

***Yuki Tomita[1]**, Natsuki Taira[1], Ken Sakai[1], Hironobu Ozawa[1] *(1.Kyushu University)*

Highly Efficient Visible-Light-Driven Water Oxidation by a Carbon Nitride Modified with Cobalt Polyoxometalate Molecular Catalyst

2P-28

***Daehan Lee[1]**, Min-Jong Bong[1], Seong Woon Jeong[1], Hyeongu Kang[1], Ho-Jin Son[1] *(1.Korea University)*

Photocatalytic Conversion of CO_2 to Formate/CO by (η^6-*para*-Cymene)Ru(II) Half-Metallocene Catalyst: Influence of Additives and TiO_2 Immobilization on Catalytic Mechanism and Product Selectivity

2P-29

***Min-Jong Bong[1]**, Daehan Lee[1], Sang Heon Jeong[1], Seung-Hwan Cha[1], Myung Jae Lee[1], Ho-Jin Son[1] *(1.Korea University)*

Secondary Sphere Impact on Organometallic Catalysts in Photochemical CO_2 Reduction: Tailoring Product Selectivity through Alcohol and Alkyloxy Tethering Ligands

2P-30

***Airi Yamaguchi[1]**, Tadashi Kanbara[1], Tomoko Yajima[1] *(1.Ochanomizu University)*

Utilization of Linear Perfluoroalkyl Aromatics Under Visible-Light

2P-31

***Tam Thi Thanh Tran[1],** Manabu Abe[1] *(1.Hiroshima University)*

Thiophene Units for Near-infrared Two-photon Uncaging of Calcium ions

2P-32

***Fan Zhang[1],** Erik Budi santiko[1], Manabu Abe[1] *(1.Hiroshima University)*

Development of two-photon responsive photocatalysts and their applications

2P-33

***Ryuei Hayashi[1]**, Ryoko Oyama[1], Manabu Abe[1] *(1.Hiroshima University)*

Mechanistic study on photo-induced deprotection of indole-type photolabile protecting groups

2P-34
***Yugo Takara[1]**, Ma-aya Takano[1], Manabu Abe[1] *(1.Hiroshima University)*
Photochemical generation of 2-arylindenyl cations with triplet ground-states

2P-35
***Shun Tian[1]**, Guixiang Li[1], Roland C. Turnell-Ritson[1], Mohammad K. Nazeeruddin[1], Paul J. Dyson[1] *(1.EPFL)*
Controlling Tin Halide Perovskite Oxidation Dynamics in Solution for Perovskite Optoelectronic Devices

2P-36
***Yuka Yoshihara[1]**, Keishi Tada[1], Jotaro Nakazaki[1], Fumiyasu Awai[1], Kazuteru Nonomura[1], Satoshi Uchida[1], Hiroshi Segawa[1] *(1.The University of Tokyo)*
Effect of In-plane Cell Structure on Photoelectric Conversion Characteristics of Perovskite Solar Cells

2P-37
***Masumi Saito[1]**, Satoshi Uchida[1], Kazuteru Nonomura[1], Ajay Kumar Jena[1], Hiroshi Segawa[1] *(1.The University of Tokyo)*
Origin of capacitance of organic lead halide perovskite solar cells

2P-38
***Andre Sarto Polo[1]**, Lucas Polimante Souto[1] *(1.Federal University of ABC)*
The Role of Mixing Methylammonium and Formamidinium Cations on the Durability of Perovskite Solar Cells

2P-39
***Nideesh Perumbalathodi[1]**, Tzu sen Su[3], Zi-Fan He[1], Kala Kannankuty[1], Tzu Chien Wei[1, 2] *(1.National Tsing Hua University, 2.National Yang-Ming Chiao Tung University, 3.National Taiwan University of Science and Technology)*
Bi-directional Passivation for Highly Efficient and Stable CuSCN-based Perovskite Solar Cell using (3-Mercaptopropyl)trimethoxysilane

2P-40
***Koichi Tamaki[1]**, Haibin Wang[1], Naoyuki Shibayama[2], Ryota Jono[1, 3], Takaya Kubo[1], Hiroshi Segawa[1] *(1.The University of Tokyo, 2.Toin University of Yokohama, 3.Research Organization for Information Science and Technology)*
Photovoltaic Performance and Long-term Stability of Lead Sulfide Quantum Dot Solar Cells Using Dicarboxylic Acid Ligands in the Hole Transport Layer

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***Min An Wei[1]**, Shafna Kunnathum Peedika[1], Tzu Chein Wei[1] *(1.National Tsing Hua University)*

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***Tatsuya Okayama[1]**, Minoru Mizuhata[1], Hiro Minamimoto[1] *(1.Kobe University)*

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