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Osaka Metropolitan University (Nakamozu Campus)

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List of Poster Presentation

PS-01 Water-gas shift reaction over Pt-Co/CeO_2 catalysts synthesized by direct chemical reduction method
○Seon-Yong Ahn, Hyun-Seog Roh
(Yonsei University)

PS-02 Role of Trace Amounts of Cobalt into Silica-Encapsulated Nickel Catalysts for Photothermal Dry Reforming of Methane
○Hamada A. EL-Naggar, Daichi Takami, Akira Yamamoto, Hisao Yoshida
(Graduate School of Human and Environmental Studies, Kyoto University)

PS-03 Controllable Product Selectivity by Light Position in Photothermal Steam Reforming of Methane
○Yuko Nishino, Wirya Sarwana, Daichi Takami, Akira Yamamoto, Hisao Yoshida
(Graduate School of Human and Environmental Studies, Kyoto University)

PS-04 Surface Engineering by GaO_x for Promoting CO_2 Hydrogenation into Formic Acid
○Hiroto Hata, Kohsuke Mori, Hiromi Yamashita
(Graduate School of Engineering, Osaka University)

PS-05 Photosynthesis of hydrogen peroxide over defective Hf-based metal-organic frameworks
○Yoshifumi Kondo[1], Kotaro Honda[1], Yasutaka Kuwahara[1,2], Kohsuke Mori[1], Hisayoshi Kobayashi[1], Hiromi Yamashita[1]
([1]Graduate School of Engineering, Osaka University, [2]JST, PRESTO)

PS-06 Gas-phase methanol synthesis from CO_2 using Pt-loaded reduced molybdenum oxide catalyst
○Koji Hamahara[1], Yasutaka Kuwahara[1,2], Hisayoshi Kobayashi[1], Hiromi Yamashita[1]
([1]Graduate School of Engineering, Osaka University, [2]JST, PRESTO)

PS-07 Barium Titanate Photocatalysts for CO_2 reduction with water
○Shuwei Liu, Hongxuan Qiu, Can Wang, Akira Yamamoto, Hisao Yoshida
(Graduate School of Human and Environmental Studies, Kyoto University)

PS-08 Investigation of the Effects of Oxygen Vacancies and Visible Light Irradiation in Reverse Water Gas Shift Reaction Using Reduced Molybdenum Oxide Catalysts

○Shintaro Naito[1], Yasutaka Kuwahara[1,2], Kusu Kazuki[1], Hiromi Yamashita[1]
([1]Graduate School of Engineering, Osaka University, [2]JST, PRESTO)

PS-09 Visible light driven Z-scheme water splitting using a metal hexacyanoferrate as a solid electron mediator

○Tomoki Inoue, Hikaru Matsuoka, Hajime Suzuki, Osamu Tomita, Akinobu Nakada, Ryu Abe
(Graduate School of Engineering, Kyoto University)

PS-10 Core-shell structured cocatalysts for selective water reduction in redox-mediated Z-scheme water splitting systems

○Yuya Okada, Hajime Suzuki, Osamu Tomita, Akinobu Nakata, Ryu Abe
(Graduate School of Engineering, Kyoto University)

PS-11 Low temperature synthesis of high entropy alloy nanoparticles by the assist of hydrogen spillover on TiO_2

○Naoki Hashimoto[1], Kohsuke Mori[1], Naoto Kamiuchi[2], Hideto Yoshida[2], Hisayoshi Kobayashi[1], Hiromi Yamashita[1]
([1]Graduate School of Engineering, Osaka University, [2]SANKEN, Osaka University)

PS-12 Heterogeneous FeO_x catalyst for N-alkylation of amines with alcohols

○Takato Fukuda, Joo Young SHIM, Masazumi Tamura
(Department of Applied Chemistry and Bioengineering, Graduate School of Engineering, Osaka Metropolitan University)

PS-13 Chemical recycling and upcycling of aliphatic polyesters by homogeneous titanium catalysts

○Asahi Tanaka, Yuriko Ohki, Yohei Ogiwara, Kotohiro Nomura
(Department of Chemistry, Faculty of Science, Tokyo Metropolitan University)

PS-14 Dehydrogenation of alcohols, amines and alkanes catalyzed by dinuclear iridiium-hydride complexes

○Taiga Yoshiike, Kotohiro Nomura, Akiko Inagaki
(Department of Chemistry, Graduate school of Science, Tokyo Metropolitan University)

PS-15 Synthesis of Pt nanosheets using graphene oxide templates with different functional group densities

○Yuki Mido, Sakae Takenaka
(Doshisha University)

PS-16 Catalytic activity of Pd catalyst supported on $Sr_3Ti_2O_7$ for purifying automotive exhaust gases

○Kousei Shingai[1], Toyokazu Tanabe[2], Saburo Hosokawa[3], Hiroyuki Asakura[4], Shimpei Naniwa[1], Shoji Iguchi[1], Kentaro Teramura[1], Tsunehiro Tanaka[1]
([1]Kyoto University, [2]National Defense Academy, [3]Kyoto Institute of Technology, [4]Kindai University)

PS-17 Efficient N-Alkylation of Amines Using Alcohols over an Air-stable Nickel-based Catalyst Supported on Hydroxyapatite

○Kazuto Ohashi, Sho Yamaguchi, Takato Mitsudome, Tomoo Mizugaki
(Graduate School of Engineering Science, Osaka University)

PS-18 Development of visible-light driven fumarate synthesis system using carbon dioxide as raw material

○Mika Takeuchi[1], Masanobu Higashi[2], Yutaka Amao[1,2]
([1]Graduate School of Science, Osaka Metropolitan University, [2]Research Center for Artificial Photosynthesis (ReCAP), Osaka Metropolitan University)

PS-19 InN Support for Enhancement of ORR Activity over Pt Catalyst

○Shun Hirose[1], Hiroyuki Asakura[2,3], Shimpei Naniwa[1], Shoji Iguchi[1], Kentaro Teramura[1,3], Tsunehiro Tanaka[1,3]
([1]Kyoto University, [2]Kindai University, [3]ESICB, Kyoto University)

PS-20 Effect of Fe addition to $Ag/K_2YTa_5O_{15}$ photocatalyst on the conversion of CO_2 using H_2O as an electron donor

○Yuki Ikeda, Shoji Iguchi, Shimpei Naniwa, Tsunehiro Tanaka, Kentaro Teramura (*Kyoto University*)

PS-21 CO_2 electrolysis using cathode catalysts containing metal complexes with 14-membered ring structure

○Takeshi Inada[1], Shoji Iguchi[1], Mana Ogawa[2], Ryo Takahama[2], Satoshi Yamauchi[2], Junya Ohyama[3], Yuta Nabae[4], Makoto Moriya[2], Shimpei Naniwa[1], Tsunehiro Tanaka[1], Kentaro Teramura[1]
([1]Kyoto University, [2]Shizuoka University, [3]Kumamoto University, [4]Tokyo Institute of Technology)

PS-22 Nanoengineering of palladium catalyst by carbidation for hydrogenation of nitrobenzene

○Sarmiento Diaz Marcelo Junior, Sho Yamaguchi, Takato Mitsudome, Tomoo Mizugaki

(Graduate School of Engineering Science, Osaka University)

PS-23 Development of reduced titanium dioxide nanorods assisted by hydrogen spillover and its photocatalytic application

○Tetsuya Toyonaga[1], Yukari Yamazaki[1], Kohsuke Mori[1], Yasutaka Kuwahara[1,2], Hiromi Yamashita[1]

([1]Graduate School of Engineering, Osaka University, [2]JST, PRESTO)

PS-24 Improvement of durability of carbon-supported platinum catalysts for PEFC cathodes by addition of tantalum oxide

○Ryo Takashiba, Sakae Takenaka

(Doshisha university)

PS-25 Al-based metal-organic frameworks for photocatalytic hydrogen peroxide production

○Kenta Hino[1], Yoshifumi Kondo[1], Yasutaka Kuwahara[1,2], Kohsuke Mori[1], Hisayoshi Kobayashi[1], Hiromi Yamashita[1]

([1]Graduate School of Engineering, Osaka University, [2]JST, PRESTO)

PS-26 Characterization of cation-defective spinel-type Fe-doped Al_2O_3 as oxygen storage materials

○Takafumi Ariyoshi[1], Hiroyuki Asakura[2,4], Saburo Hosokawa[3], Shimpei Naniwa[1], Shoji Iguchi[1], Kentaro Teramura[1,4], Tsunehiro Tanaka[1,4]

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PS-27 Improvement of photoelectrochemical properties for water oxidation on $BiVO_4$ modified with bulk and surface

○Waka Matsumoto, Shinya Higashimoto

(Graduate School of Engineering, Osaka Institute of Technology)

PS-28 Plasmon-induced hydrogenation of styrene over Au/ZrO_2

○Tamaki Okamoto, Eri Fudo, Atsuhiro Tanaka, Hiroshi Kominami

(Kindai University)

PS-29 Reaction temperature dependence in reductive production of hydrogen peroxide over WO_3 photocatalyst

○Kaisei Kamitani, Atsuhiro Tanaka, Hiroshi Kominami

(Kindai University)

PS-30 Design of porous carbon materials with unique nanoarchitectures and their application to the adsorption of proteins

○Yaohuan Zhang[1], Zhengyu Pu[1], Yasuhiro Sakamoto[1], Masaya Matsuoka[1,2], Takashi Kamegawa[1,2]

([1]Osaka Prefecture University, [2]Osaka Metropolitan University)

PS-31 Effects of Nafion coating on photocatalytic hydrogen peroxide generation on Pd-supported bismuth vanadate

○Ryohei Suzuki[1], Kojiro Fuku[2], Kazuhiro Sayama[3], Naoki Ikenaga[2]

([1]Graduate School of Science and Engineering, Kansai University, [2]Faculty of Environmental and Urban Engineering, Kansai University, [3]National Institute of Advanced Industrial Science and Technology)

PS-32 Complete photodegradation of VOCs on Cu-supported WO_3 photocatalyst: Enhancement of activity by physical mixing with TiO_2.

○Kosuke Imai, Shinya Higashimoto

(Graduate School of Engineering, Osaka Institute of Technology)

PS-33 Quasi-solid-state $CuInS_2$ quantum dot solar cells using silica-containing ionic liquids

○Mizuki Inada, Shinya Higashimoto

(Graduate School of Engineering, Osaka Institute of Technology)

PS-34 Facile shaping of MOFs using flexible organosilane gels for the application to gas adsorption materials

○Hironori Iwahashi, Yu Horiuchi, Masaya Matsuoka

(Graduate School of Engineering, Osaka Metropolitan University)