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PS-01 MOF at intefaces in PdAg nanocatalyst-supported TiO_2 for the improved hydrogenation of CO_2

○Atsushi Konishi[1], Kohsuke Mori[1,2], Hiromi Yamashita[1,2]

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PS-02 Effective driving of Ag-loaded Al-doped $SrTiO_3$ under irradiation at λ >300 nm for the photocatalytic conversion of CO_2 by H_2O

○Shuying Wang[1], Kentaro Teramura[1,2], Hiroyuki Asakura[1,2], Saburo Hosokawa[1,2], Tsunehiro Tanaka[1,2]

(*[1]Department of Molecular Engineering, Graduate School of Engineering, Kyoto University, [2]Element Strategy Initiative for Catalysts & Batteries (ESICB), Kyoto University*)

PS-03 A silver-manganese dual cocatalyst for selective carbon dioxide reduction into carbon monoxide over potassium hexatitanate photocatalyst with water

○ Xing Zhu[1], Akira Yamamoto[1,2], Shota Imai[3], Atsuhiro Tanaka[4,5], Hiroshi Kominami[4], and Hisao Yoshida[1,2]

(*[1]Graduate School of Human and Environmental Studies, Kyoto University, [2]Elements Strategy Initiative for Catalysts and Batteries (ESICB), Kyoto University, [3]Molecular and Material Engineering, Interdisciplinary Graduate School of Science and Engineering, Kindai University, [4]Department of Applied Chemistry, Faculty of Science and Engineering Kindai University, [5]Precursory Research for Embryonic Science and Technology (PRESTO), Japan Science and Technology Agency (JST)*)

PS-04 Effect of metallic shell layer on hydrogenation property of titanium(IV) oxide photocatalyst having palladium nanoparticles

○Shota Imai[1], Atsuhiro Tanaka[1,2,3], Hiroshi Kominami[2]

(*[1]Graduate School of Science and Engineering, Kindai University, [2]Faculty of Science and Engineering, Kindai University, [3]JST PRESTO*)

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○Ryosuke Manabe, Shinya Mine, Yu Horiuchi, Masaya Matsuoka

(*Department of Applied Chemistry, Graduate School of Engineering, Osaka Prefecture University*)

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○Che-Wei Chang, Ting-Fang Yu, Yu-Chuan Lin

(*Department of Chemical Engineering, National Cheng Kung University*)

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○Hiroki Kondo, Takato Mitsudome, Koichiro Jitsukawa, Tomoo Mizugaki

(*Graduate School of Engineering Science, Osaka University*)

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○Takaaki Murakami[1], Kohsuke Mori[1,2], Hiromi Yamashita[1,2]

([1]*Division of Materials and Science, Graduate School of Engineering, Osaka University,* [2]*ESICB, Kyoto University*)

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○Takumi Koga[1], Daiki Fujimoto[1], Kojiro Fuku[2], Kazuhiro Sayama[3], Naoki Ikenaga[2]

([1]*Graduate School of Science and Engineering, Kansai University,* [2]*Department of Chemical, Energy and Environmental Engineering, Kansai University,* [3]*National Institute of Advanced Industrial Science and Technology*)

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○ Xuanwen Xu[1], Kentaro Teramura[1,2], Hiroyuki Asakura[1,2], Saburo Hosokawa[1,2], Tsunehiro Tanaka[1,2]

([1]*Department of Molecular Engineering, Graduate School of Engineering, Kyoto University,* [2]*ESICB, Kyoto University*)

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○Yuta Saito[1], Akira Yamamoto[1,2], Hisao Yoshida[1,2]

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○Kazuki Hayami[1], Atsuhiro Tanaka[2,3], Hiroshi Kominami[2]

(*[1]Graduate School of Science and Engineering, Kindai University, [2]Faculty of Science and Engineering, Kindai University, [3]JST PRESTO*)

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○Shuji Kamemoto, Shinya Higashimoto

(*Department of Applied Chemistry, Faculty of Engineering, Osaka Institute of Technology*)

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○Kenta Sonoda[1], Muneaki Yamamoto[2], Tetsuo Tanabe[2], Tomoko Yoshida[2]

(*[1]Applied Chemistry and Bioengineering, Graduate School of Engineering, Osaka City University, [2]Advanced Research Institute for Natural Science and Technology, Osaka City University*)

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○Hideki Shoji[1], Makoto Sano[1], Toshimitsu Suzuki[1], Piyasan Praserthdam[2], Hiromi Yamashita[3], Takanori Miyake[1]

(*[1]Department of Chemical, Energy and Environmental Engineering, Kansai University, [2]Chulalongkorn University, [3]Osaka University*)

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○Rinsuke Suzuki[1], Saburo Hosokawa[1,2], Hiroyuki Asakura[1,2], Kentaro Teramura[1,2], Tsunehiro Tanaka[1,2]

(*[1]Department of Molecular Engineering, Graduate School of Engineering, Kyoto University, [2]Element Strategy Initiative for Catalysis & Batteries, Kyoto University*)

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○Yasutaka Hamada, Junichiro Kugai
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(*[1]Division of Materials and Science, Graduate School of Engineering, Osaka University, [2]ESICB, Kyoto University, [3]JST, PRESTO*)

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(*Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University*)

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○Sakae Araki[1], Kousuke Nakanishi[2], Atsuhiro Tanaka[2,3], Hiroshi Kominami[2]
(*[1]Graduate school of science and engineering, Kindai University, [2]Faculty of science and engineering, Kindai University , [3]JST PRESTO*)

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○Shinya Mine[1], Satoru Dohshi[2], Yu Horiuchi[1], Masaya Matsuoka[1]
(*[1]Graduate school of Engineering, Osaka Prefecture University, [2]Osaka Research Institute of Industrial Science and Technology*)

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○ Kokoro Yoshioka[1], Muneaki Yamamoto[2], Daiki Kitajima[1], Tetsuo Tanabe[2], Tomoko Yoshida[2]
(*[1]Graduate School of Engineering, Osaka City University, [2]Advanced Research Institute for Natural Science, Osaka City University*)

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◯Taisei Akagi[1], Kojiro Fuku[2], Naoki Ikenaga[2]

(*[1]Graduate School of Science and Engineering, Kansai University, [2]Department of Chemical, Energy and Environmental Engineering, Kansai University*)

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○ Takahiro Endo[1], Kazuki Tamai[1], Saburo Hosokawa[1,2], Hiroyuki Asakura[1,2], Kentaro Teramura[1,2], Tsunehiro Tanaka[1,2]

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◯Wirya Sarwana[1], Akihiko Anzai[1], Akira Yamamoto[1,2], Hisao Yoshida[1,2]

(*[1]Graduate School of Human and Environmental Studies, Kyoto University, [2]Elements Strategy Initiative for Catalysts and Batteries, Kyoto University*)

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◯Kohei Doi[1], Yasutaka Kuwahara[1,2,3], Hiromi Yamashita[1,2]

(*[1]Division of Materials and Science, Graduate School of Engineering, Osaka University, [2]ESICB, Kyoto University, [3]JST, PRESTO*)

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◯Yusuke Minami[1], Shusaku Ikeyama[2], Yutaka Amao[1,2]

(*[1]Graduate School of Science, Osaka City University, [2]The Advanced Research Institute for Natural Science and Technology, Osaka City University*)

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○ Masashige Morishita[1], Kentaro Teramura[1,2], Hiroyuki Asakura[1,2], Saburo Hosokawa[1,2], Tsunehiro Tanaka[1,2]

(*[1]Graduated School of Engineering, Kyoto University, [2]ESICB, Kyoto University*)

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○Takeshi Miyai, Osamu Tomita, Hajime Suzuki, Ryu Abe
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○Kazuki Shun[1], Shinya Masuda[1], Kohsuke Mori[1,2], Yasutaka Kuwahara[1,2,3], Hiromi Yamashita[1,2]
([1]*Division of Materials and Science, Graduate School of Engineering, Osaka University,* [2]*ESICB, Kyoto University,* [3]*JST, PRESTO*)

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○Ryota Ito, Masato Akatsuka, Muneaki Yamamoto, Tetsuo Tanabe, Tomoko Yoshida
(*Applied Chemistry and Bioengineering, Graduate School of Engineering, Osaka City University*)

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○Kuniaki Matoba, Shinya Higashimoto
(*Department of Applied Chemistry, Faculty of Engineering, Osaka Institute of Technology*)

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○Daichi Takami[1], Yoji Ito[1], Akira Yamamoto[1,2], Hisao Yoshida[1,2]
([1]*Graduate School of Human and Environmental Studies, Kyoto University,* [2]*Elements Strategy Initiative for Catalysts and Batteries, Kyoto University*)

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○Chen Xiaolang[1], Kohsuke Mori[1,2], Yasutaka Kuwahara[1,2,3], Hiromi Yamashita[1,2]
([1]*Division of Materials and Science, Graduate School of Engineering, Osaka University,* [2]*ESICB, Kyoto University,* [3]*JST, PRESTO*)

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○ Ya-Ju Tsou, Cheng-Chieh Tu, Yu-Chuan Lin

(*Department of Chemical Engineering, National Cheng Kung University*)

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○Kazuki Hoshita[1], Kojiro Fuku[2], Naoki Ikenaga[2]

(*[1]Graduate School of Science and Engineering, Kansai University, [2]Department of Chemical, Energy and Environmental Engineering, Faculty of Environmental and Urban Engineering, Kansai University*)

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○Surya Pratap Singh[1], Akira Yamamoto[1,2,] Hisao Yoshida[1,2]

(*[1]Graduate School of Human and Environmental Studies, Kyoto University, [2]Elements Strategy Initiative for Catalysts and Batteries (ESICB), Kyoto University*)

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○Daiki Kitajima[1], Muneaki Yamamoto[2], Tetsuo Tanabe[2], Tomoko Yoshida[1]

(*[1]Graduate School of Engineering, Osaka City University, [2]Advanced Research Institute for Natural Science and Technology, Osaka City University*)

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○Hiroyuki Tanaka[1], Hiroyuki Asakura[1,2], Saburo Hosokawa[1,2], Kentaro Teramura[1,2], Tsunehiro Tanaka[1,2]

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