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STANFORD ADVISORS

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Publications

PUBLICATIONS

- **Hydrogen generation via ammonia decomposition on highly efficient and stable Ru-free catalysts: approaching complete conversion at 450 degrees** *C ENERGY & ENVIRONMENTAL SCIENCE*
Tabassum, H., Mukherjee, S., Chen, J., Holiharimanana, D., Karakalos, S., Yang, X., Hwang, S., Zhang, T., Lu, B., Chen, M., Tang, Z., Kyriakidou, E. A., Ge, et al
2022; 15 (10): 4190-4200
- **Effect of cobalt incorporation on the stability of ionic Pd in the presence of carbon monoxide over Pd/BEA passive NOx adsorbers** *CHEMICAL ENGINEERING JOURNAL*
Lee, J., Chen, J., Giewont, K., Mon, T., Liu, C., Walker, E. A., Kyriakidou, E. A.
2022; 440
- **A General Route to Flame Aerosol Synthesis and in situ Functionalization of Mesoporous Silica.** *Angewandte Chemie (International ed. in English)*
Liu, S., Dun, C., Chen, J., Rao, S., Shah, M., Wei, J., Chen, K., Xuan, Z., Kyriakidou, E. A., Urban, J. J., Swihart, M. T.
2022
- **Hydrothermally stable Pd/SiO₂@Zr Core@Shell catalysts for diesel oxidation applications** *CHEMICAL ENGINEERING JOURNAL*
Liu, C., Chen, J., Toops, T. J., Choi, J., Thomas, C., Lance, M. J., Kyriakidou, E. A.
2021; 425
- **Ag/ZSM-5 traps for C₂H₄ and C₇H₈ adsorption under cold-start conditions** *MICROPOROUS AND MESOPOROUS MATERIALS*
Lee, J., Giewont, K., Chen, J., Liu, C., Walker, E. A., Kyriakidou, E. L.
2021; 327
- **Cobalt-Induced PdO Formation in Low-Loading Pd/BEA Catalysts for CH₄ Oxidation** *ACS CATALYSIS*
Chen, J., Giewont, K., Walker, E. A., Lee, J., Niu, Y., Kyriakidou, E. A.
2021; 11 (21): 13066-13076
- **Mechanistic Understanding of Methane Combustion over Ni/CeO₂: A Combined Experimental and Theoretical Approach** *ACS CATALYSIS*
Chen, J., Buchanan, T., Walker, E. A., Toops, T. J., Li, Z., Kunal, P., Kyriakidou, E. A.
2021; 11 (15): 9345-9354
- **Hollow nanosphere construction of covalent organic frameworks for catalysis: (Pd/C)@TpPa COFs in Suzuki coupling reaction** *JOURNAL OF COLLOID AND INTERFACE SCIENCE*
Li, Y., Pei, B., Chen, J., Bing, S., Hou, L., Sun, Q., Xu, G., Yao, Z., Zhang, L.
2021; 591: 273-280

- **Single-Step Flame Aerosol Synthesis of Active and Stable Nanocatalysts for the Dry Reforming of Methane** *ACS APPLIED MATERIALS & INTERFACES*
Mohammadi, M., Shah, C., Dhandapani, S., Chen, J., Abraham, S., Sullivan, W., Buchner, R. D., Kyriakidou, E. A., Lin, H., Lund, C. F., Swihart, M. T.
2021; 13 (15): 17618-17628
- **Methane Combustion Over Ni/Ce(x)Zr(1-x)O(2) Catalysts: Impact of Ceria/Zirconia Ratio** *CHEMCATCHEM*
Chen, J., Carlson, B. D., Toops, T. J., Li, Z., Lance, M. J., Karakalos, S. G., Choi, J., Kyriakidou, E. A.
2020; 12 (21): 5558-5568
- **Boron-hyperdoped silicon for the selective oxidative dehydrogenation of propane to propylene** *CHEMICAL COMMUNICATIONS*
Chen, J., Rohani, P., Karakalos, S. G., Lance, M. J., Toops, T. J., Swihart, M. T., Kyriakidou, E. A.
2020; 56 (68): 9882-9885
- **Hyperbranched poly(amidoamine)/TMC reverse osmosis membrane for oily saline water treatment** *ENVIRONMENTAL TECHNOLOGY*
Pei, B., Chen, J., Liu, P., He, T., Li, X., Zhang, L.
2019; 40 (21): 2779-2788
- **Enhanced effect of daytime restricted feeding on the circadian rhythm of streptozotocin-induced type 2 diabetic rats** *AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM*
Wu, T., ZhuGe, F., Sun, L., Ni, Y., Fu, O., Gao, G., Chen, J., Kato, H., Fu, Z.
2012; 302 (9): E1027-E1035