Yu-Chuan Lin

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EDUCATION

Kansas State University (Chemical Engineering), Ph. D.	2002 - 2006
National Cheng Kung University (Chemical Engineering), M. S.	2000 - 2002
National Cheng Kung University (Chemical Engineering), B. S.	1996 - 2000

PROFESSIONAL CAREER

Professor, National Cheng Kung University	2022 - present
Associate professor, National Cheng Kung University	2018 - 2022
Assistant professor, National Cheng Kung University	2014 - 2018
Associate professor, Yuan Ze University	2013 - 2014
Assistant professor, Yuan Ze University	2009 - 2013
Post-doctoral Researcher, University of Massachusetts-Amherst	2008 - 2009
Post-doctoral Researcher, Academia Sinica	2007 - 2008

HONOR AND AWARDS

World Ranking of Top 2% Scientists (2020, 2021)
The outstanding research paper award from Taiwan Catalysis Society (2019)
Outstanding young scientists research funding recipient from MOST (2015, 2020)
Outstanding young scholar research award, Yuan Ze University (2012)

RESEARCH INTERESTS

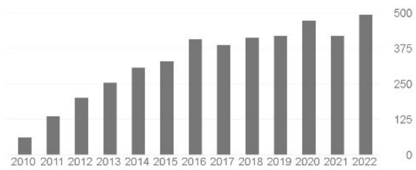
Heterogeneous catalysis and reaction engineering
CO_2 and CH_4 utilization
Biomass valorization

PROFESSIONAL ASSOCIATIONS

Taiwan catalysis society, board member	2019 – Present
Chemical engineering, editorial board	2016 – 2020
Taiwan institute of chemical engineers, member	2009 - Present

RESEARCH OUTPUTS

Publications in international peer-reviewed journals: 64
Citations (Google Scholar): 4665
H-index (Google Scholar): 27
I10-index (Google Scholar): 47
Patents applications as an (co)-inventor: 1



REVIEWER

ACS Catalysis, ACS Omega, ACS Applied Nano Materials, ChemSusChem, Applied Catalysis B, ACS Sustainable Chemistry and Engineering, ChemCatChem, Catalysis Science & Technology, Applied Catalysis A, RSC Advances, Applied Surface Science, Catalysis Today, Molecular Catalysis, Topics in Catalysis, Catalysis Communications, Reaction Kinetics Mechanisms and Catalysis, Industrial Engineering and Chemistry Research, Microporous Mesoporous Materials, Chemistry-An Asia Journal, Catalysis Letters, Cell Reports Physical Science, Green Chemistry, Fuel, Fuel Processing Technology, Energy & Fuels

COURSES TAUGHT

Chemical reaction engineering, enzyme catalysis and non-isothermal reactor
Advanced chemical reaction engineering, reaction mechanism and kinetic analysis
The principle and application of catalysis
Fuel cell technology

Publications

[1] C.-H. Chen, H.-K. Chen, W.-H. Huang, C.-L. Chen, K. Choojun, T. Sooknoi, H.-K. Tian, Y.-C. Lin, Reversal of methanation-oriented to RWGS-oriented Ni/SiO_2 catalysts by the exsolution of Ni^{2+} confined in silicalite-1, Green Chemistry, (2023) doi.org/10.1039/D3GC02399K.

[2] A. Matsuda, K. Obara, A. Ishikawa, M.-H. Tsai, C.-H. Wang, Y.-C. Lin, M. Hara, K. Kamata, Bismuth phosphate nanoparticle catalyst for direct oxidation of methane into formaldehyde, Catal. Sci. Technol., (2023) doi.org/10.1039/D3CY00590A.

[3] D.-T. To, J.C. Juan, M.-H. Tsai, C.-H. Wang, C.-W. Pao, C.-L. Chen, Y.-C. Lin, Conversion of CO_2 to Light Hydrocarbons by Using FeCx Catalysts Derived from Iron Nitrate Co-pyrolyzing with Melamine, Bulk g-C_3N_4, or Defective g-C3N4, Catal. Surv. Asia, 27 (2023) 260–269.

[4] N. Asikin-Mijan, J.C. Juan, Y.H. Taufiq-Yap, H.C. Ong, Y.-C. Lin, G. AbdulKareem-Alsultan, H.V. Lee, Towards sustainable green diesel fuel production: Advancements and opportunities in acid-base catalyzed H_2-free deoxygenation process, Catal. Commun., 182 (2023) 106741.

[5] K. Trangwachirachai, I.T. Kao, W.-H. Huang, C.L. Chen, Y.-C. Lin, Co-activation of methane and nitrogen to acetonitrile over MoC_x/Al_2O_3 catalysts, Catal. Sci. Technol., (2023) doi.org/10.1039/D3CY00585B.

[6] A. Volperts, D. Upskuviene, A. Balciunaite, V. Jasulaitiene, G. Niaura, A. Drabavicius, A. Plavniece, G. Dobele, A. Zhurinsh, Y.-C. Lin, Y.-W. Chen, L. Tamasauskaite-Tamasiunaite, E. Norkus, Copper-nitrogen dual-doped activated carbon derived from alder wood as an electrocatalyst for oxygen reduction, Catal. Commun., 182 (2023) 106743.

[7] K. Trangwachirachai, Y.-C. Lin, Light hydrocarbon conversion to acrylonitrile and acetonitrile – a review, Dalton Trans., 52 (2023) 6211-6225.

[8] K. Trangwachirachai, A.L. Huang, H.K. Chen, C.L. Chen, J.F. Lee, H.K. Tian, Y.C. Lin, Reduction of supported GaN and its application in methane conversion, Mater. Today Chem., 30 (2023) 101500.

[9] Y.-C. Lin, C.-H. Hsieh, Cobalt Catalysts Derived from Layered Double Hydroxide/g-C3N4 Composite in the Hydrogenation of γ-Valerolactone into 1,4-Pentanediol, Catal. Surv. Asia, 27 (2023) 20-28.

[10] B.-Y. Chen, G. Dobele, A. Plavniece, A. Volperts, L. Tamasauskaite-Tamasiunaite, E. Norkus, C.-L. Chen, Y.-C. Lin, Catalytic hydrogenation of CO2 to light olefins by using K-doped FeCx catalysts derived from the Fe-chitosan complex, Int. J. Hydrogen Energy, 48 (2023) 4276-4286.

[11] K. Trangwachirachai, C.-H. Chen, A.-L. Huang, J.-F. Lee, C.-L. Chen, Y.-C. Lin, Conversion of methane to acetonitrile over GaN catalysts derived from gallium nitrate hydrate co-pyrolyzed with melamine, melem, or g-C3N4: the influence of nitrogen precursors, Catal. Sci. Technol., 12 (2022) 320-331.

[12] D.-T. To, Y.-C. Chiang, J.-F. Lee, C.-L. Chen, Y.-C. Lin, Nitrogen-Doped Co Catalyst Derived from Carbothermal Reduction of Cobalt Phyllosilicate and its Application in Levulinic Acid Hydrogenation to γ-Valerolactone, Catal. Lett., 152 (2022) 2090-2100.

[13] W. Prasanseang, K. Choojun, Y. Poo-arporn, A.-L. Huang, Y.-C. Lin, T. Sooknoi, Linear long-chain α-olefins from hydrodeoxygenation of methyl palmitate over copper phyllosilicate catalysts, Appl. Catal. A, 635 (2022) 118555.

[14] C.-C. Li, C.-H. Hsieh, Y.-C. Lin, Ni/SiO2 catalysts derived from carbothermal reduction of nickel phyllosilicate in the hydrogenation of levulinic acid to γ-valerolactone: The efficacy of nitrogen decoration, Mol. Catal., 523 (2022) 111720.

[15] R. Kumar, C.-C. Li, C.-H. Wu, T.-W. Tzeng, D.-L.M. Tzou, Y.-C. Lin, P.-W. Chung, Silica-Supported Nanoscale Hydrotalcite-Derived Oxides for C4 Chemicals from Ethanol Condensation, ACS Appl. Nano Mater., 5 (2022) 7885-7895.

[16] E. Halim, C.-P. Lee, W.-C. Wang, J.-K. Lin, Y.-C. Lin, Production of hydro-processed renewable jet fuel over SAPO-11-based catalyst, Int. J. Energy Res., 46 (2022) 1059-1076.

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[19] K. Trangwachirachai, C.-H. Chen, Y.-C. Lin, Anaerobic conversion of methane to acetonitrile over solid-state-pyrolysis-synthesized GaN catalysts, Mol. Catal., 516 (2021) 111961.

[20] D.-T. To, Y.-C. Lin, Copper Phyllosilicates-Derived Catalysts in the Production of Alcohols from Hydrogenation of Carboxylates, Carboxylic Acids, Carbonates, Formyls, and CO2: A Review, Catalysts, 11 (2021) 255.

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[22] Y.-J. Tsou, T.D. To, Y.-C. Chiang, J.-F. Lee, R. Kumar, P.-W. Chung, Y.-C. Lin, Hydrophobic Copper Catalysts Derived from Copper Phyllosilicates in the Hydrogenation of Levulinic Acid to γ-Valerolactone, ACS Appl. Meter. Interaces, 12 (2020) 54851-54861.

[23] M.-Y. Choo, L.E. Oi, T.C. Ling, E.-P. Ng, Y.-C. Lin, G. Centi, J.C. Juan, Deoxygenation of triolein to green diesel in the H2-free condition: Effect of transition metal oxide supported on zeolite Y, J. Anal. Appl. Pyrolysis, 147 (2020) 104797.

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