

BIOGRAPHICAL DATA

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SHORT BIO

Dr. Chih Wei Chu is a research fellow in the Research Center for Applied Sciences (RCAS) at Academia Sinica and an adjunct Professor in the College of Engineering at Chang Gung University since 2015. He earned his Ph.D. in Material Science and Engineering from the University of California, Los Angeles in 2006. He joined RCAS as an assistant research fellow in 2006, and subsequently rose to the positions of associate research fellow in 2010 and research fellow in 2014. Currently, he serves as the Acting Executive Officer of the Thematic Center for Green Technology in RCAS. With over 200 published refereed papers and more than 20,000 citations (H-index 66), his research focuses on advancing materials for energy-saving, conversion, and storage technologies.

EDUCATION

2001-2006: Ph.D. Materials Science & Engineering, University of California, Los Angeles, USA.
1997-1998: M.S. Civil and Environmental Engineering University of California, Los Angeles, USA.
1991-1995: B.S. Chemical Engineering, Chung Yuan University, Taoyuan, Taiwan.

EXPERIENCE

2023-date: Acting Executive Officer, Thematic Center for Green Technology, RCAS, Academia Sinica, Taiwan.
2019-date: Professor (Joint Appointment), Department of Photonics, National Yang Ming Chiao Tung University, Hsinchu, Taiwan.
2017-2020: Professor (Joint Appointment), Department of Materials Science and Engineering, National Tsing Hua University, Hsinchu, Taiwan.
2016-2022: Deputy Director, RCAS, Academia Sinica, Taiwan.
2014-date: Professor (Joint Appointment), College of Engineering, Chang Gung University, Taiwan.
2014-date: Research Fellow, RCAS, Academia Sinica, Taiwan.
2010-2014: Associate Research Fellow, RCAS, Academia Sinica, Taiwan.
2006-2010: Assistant Research Fellow, RCAS, Academia Sinica, Taiwan.
1998-2001: Senior R&D engineer, Intoplast Group, Ltd, Texas, USA.

Awards and Honors:

2022 SPIE senior member
2020 World's Top 2% Scientists
2019 Young Scientist of Asia Pacific Academy of Materials
2019 Associate Academician of Asia Pacific Academy of Materials
2014 Career Development Award, Academia Sinica

REPRESENTATIVE PUBLICAITONS:

1. C. Hanmandlu, R. Paste, H. Tsai, S. N. S. Yadav, K. W. Lai, Y. Y. Wang, C. S. Gantepogu, C. H. Hou, J. J. Shyue, Y. J. Lu, T. S. Jadhav, J. M. Liao, H. H. Chou, H. Q. Wong, T. J. Yen, C. S. Lai, D. Ghosh, S. Tretiak, H. J. Yen, C. W. Chu, 2023 "3D Nanographene Precursor Suppress Interfacial Recombination in PEDOT: PSS based Perovskite Solar Cells" *Nano Energy*, 107, 108136.
2. S. A. Abbas, H. A. Chen, A. Mohapatra, A. Singh, C. W. Pao, C. W. Chu, 2022 "Sweetening Lithium Metal Interface by High Surface and Adhesive Energy Coating of Crystalline α -D-Glucose Film to Inhibit Dendrite Growth" *Small*, 18, 2201349.
3. A. Singh, P. T. Lai, A. Mohapatra, C. Y. Chen, H. W. Lin, Y. J. Lu, C. W. Chu, 2021 "Panchromatic heterojunction solar cells for Pb-free All-Inorganic Antimony Based Perovskite" *Chemical Engineering Journal*, 419, 129424.
4. A. Mohapatra, A. Singh, S. A. Abbas, Y. J. Lu, K. M. Boopathi, C. Hanmandlu, N. Kaisar, C. H. Lee, C. W. Chu, 2019 "Bilayer polymer solar cells prepared with transfer printing of active layers from controlled swelling/de-swelling of PDMS" *Nano Energy*, 63, 103826.
5. Y. A. Lu, T. H. Chang, S. H. Wu, C. C. Liu, K. W. Lai, Y. C. Chang, Y. C. Chiang, H. C. Lu, C. W. Chu, K. C. Ho, 2019 "Coral-like perovskite nanostructures for enhanced light-harvesting and accelerated charge extraction in perovskite solar cells", *Nano Energy*, 58, 138.
6. T. H. Chang, C. W. Kung, H. W. Chen, T. Y. Huang, S. Y. Kao, H. C. Lu, M. H. Lee, K. M. Boopathi, C. W. Chu, K. C. Ho, 2015 "Planar Heterojunction Perovskite Solar Cells Incorporating Metal-Organic Framework Nanocrystals" *Advanced Materials*, 27, 7229.
7. S. S. Cheng, P. Y. Huang, M. Ramesh, H. C. Chang, L. M. Chen, C. M. Yeh, C. L. Fung, M. C. Wu, C. C. Liu, C. Kim, H. C. Lin, M. C. Chen, C. W. Chu, 2014 "Solution-Processed Small-Molecule Bulk Heterojunction Ambipolar Transistors" *Advanced Functional Materials*, 24, 2057.
8. H. Y. Wei, J. H. Huang, C. Y. Hsu, F. C. Chang, K. C. Ho, C. W. Chu, 2013 "Organic solar cells featuring nanobowl structures", *Energy & Environmental Science*, 6, 1192.
9. D. Alemu, H. Y. Wei, K. C. Ho, C. W. Chu, 2012, "Highly conductive PEDOT:PSS electrode by simple film treatment with methanol for ITO-free polymer solar cells" *Energy & Environmental Science*, 5, 9662.
10. J. H. Huang, J. H. Fang, C. C. Liu, C. W. Chu, 2011, "Effective Work Function Modulation of Graphene/Carbon Nanotube Composite Films As Transparent Cathodes for Organic Optoelectronics", *ACS Nano*, 5, 6262.
11. C. F. Sung, D. Kekuda, L. F. Chu, Y. Z. Lee, F. C. Chen, M. C. Wu, C. W. Chu, 2009 "Flexible Fullerene Field-Effect Transistors Fabricated Through Solution Processing" *Advanced Materials*, 21, 4845.
12. S. S. Cheng, Y. C. Chuang, D. Kekuda, C. W. Ou, M. C. Wu, C. W. Chu, 2009, "Organic Base Modulation Triodes and Their Inverters on Flexible Substrates", *Advanced Materials*, 21, 1860.