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➤ *Personal Details*

Citizenship: Chinese
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➤ *Education*

09.2005 - 07.2009 BSc in Biomedical Engineering, Nanchang Hangkong University, China
09.2009 - 06.2012 MSc in Biomedical Engineering, Southeast University, China

➤ *Work Experience*

08/2016 -- 06/2018: *Xi'an Jiaotong - Liverpool University*, Research Assistant.
Study on the electron transfer among the inorganic minerals and living microorganisms in the redox gradient zone of wetlands (paddy soil) by start-of-the-art elemental analytic instruments (ICP-MS, UV-Vis, GC-MS, etc.), and microbial fuel cells.

07/2012 -- 07/2016: *Suzhou Institute of Nano-Tech, Chinese Academy of Science*, Research Assistant.
Study on the super-hydrophobic films with micro- and nanostructure; Creation of conductive liquid-solid-air three phase films for biosensors and biofuel cell.

06/2011 -- 10/2011: *Hong Kong Baptist University*, Research Assistant.
Study on the electrochemical enzymatic biosensors using nano-carbon composites electrocatalysts (Graphene/polymer or Graphen/Pt).

➤ *Languages*

Chinese: mother tongue
English: fluent in speech and writing
German: very basic

➤ *Publications*

2020 H. C. Chang, W. Gustave, Z. F. Yuan, Y. Xiao, Z. Chen*,
One-step fabrication of binder-free air cathode for microbial fuel cells by using balsa wood biochar. *Environmental Technology & Innovation*, 2020, 18, 100615.

A. T. Abrera, H. C. Chang, D. Kracher, R. Ludwig, D. Haltrich*,
Characterization of pyranose oxidase variants for bioelectrocatalytic applications. *Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics*, 2020, 1868, 140335

F. Filandr, P. Man, P. Halada, H. C. Chang, R. Ludwig & D. Kracher, The

- H₂O₂-dependent activity of a fungal lytic polysaccharide monooxygenase investigated with a turbidimetric assay. *Biotechnology for Biofuels*, 13, 37 (2020).
- 2019 E. Breslmayr, S. Daly, A. Požgajčić, H. C. Chang, C. Oostenbrink, R. Ludwig*,
Improved spectrophotometric assay for lytic polysaccharide monooxygenase. *Biotechnology for Biofuels*, 12, 283 (2019).
- 2018 W. Gustave, Z. F. Yuan, R. Sekar, H. C. Chang, Y. X. Ren, Z. Chen*,
Arsenic mitigation in paddy soils by using microbial fuel cells. *Environmental Pollution*, 2018, 238, 647-655.
W. Gustave, Z. F. Yuan, R. Sekar, Y. X. Ren, H. C. Chang, J. Y. Liu, Z. Chen*, The change in biotic and abiotic soil components influenced by paddy soil microbial fuel cells loaded with various resistances. *Journal of Soils and Sediments*, 2018, 19, 106-115.)
- 2017 X. Q. Cheng, J. Zhang, H. C. Chang, L. Q. Luo, X. J. Feng*,
High-performance Cu/Cu₂O nanohybrid electrocatalyst for nonenzymatic glucose detection. *Journal of Materials Chemistry B*, 2016, 4, 4652-4656.
- 2015 Z. Q. Song, H. C. Chang, W. Q. Zhu, C. L. Xu, X. J. Feng*, Rhodium Nanoparticle-mesoporous Silicon Nanowire Nanohybrids for Hydrogen Peroxide Detection with High Selectivity. *Scientific Report*, 2015, 5, 1-4.
- 2014 H. C. Chang, Y. J. Lei, X. J. Feng*, Strongly coupled Rh/Graphene hybrids for H₂O₂ oxidation with ultra-low potential and enhanced activity. *ChemElectroChem*, 2014, 1, 1480–1483.
- 2013 H. C. Chang, X. M. Wang*, K. K. Shiu*, Y. L. Zhu, H. Zhang,
Layer-by-layer assembly of graphene, Au, and poly(toluidine blue O) films sensor for evaluation of oxidative stress of tumor cells elicited by hydrogen peroxide. *Biosensors and Bioelectronics*, 2013, 41 789-794.
G. Zhang, H. C. Chang, X. M. Wang*, Apoptosis induction and inhibition of drug-resistant tumor growth in vivo involving daunorubicin-loaded graphene–gold composites. *Journal of Materials Chemistry B*, 2013, 1, 493-499.
- 2011 H. C. Chang, X. J. Wu, H. Jiang, X. M. Wang*, Catalytic oxidation and determination of β -NADH using self-assembly hybrid of gold nanoparticles and graphene. *Analyst*, 2011 136 2735-2740.