

Changming Liu

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💻 lcmwan53.github.io

Employment History

- 2017 – 2018 📖 **Research Assistant**
Department of Chemical Engineering, Tsinghua University
- 2015 – 2016 📖 **Researcher**
BGI.GBI Corporation, Beijing, China

Education

- 2021 – Now 📖 **University of Virginia**, Charlottesville, VA, USA
Master Student in Computer Engineering (cumulative GPA: 3.77). Took courses and developed a deep understanding in:
- Matrix
 - Probability Theory
 - Statistics
 - Algorithm
- 2018 – 2021 📖 **University of Virginia**, Charlottesville, VA, USA
M.S. in Chemical Engineering
- Researched on quantum mechanics and machine learning.
 - Used python-based tools to solve problems in computational chemistry.
 - Developed neural network models to predict properties of chemicals.
- 2011 – 2015 📖 **East China University of Science and Technology**, Shanghai, China
B.E. in Pharmaceutical Engineering

Research Publications

- 1 Liu, C., Wijewardena, D. P., Sviripa, A., Sampath, A., Flaherty, D. W., & Paolucci, C. (2022). Computational and experimental insights into reactive forms of oxygen species on dynamic ag surfaces under ethylene epoxidation conditions. *Journal of Catalysis*, 405, 445–461.
- 2 Bregante, D. T., Wilcox, L. N., Liu, C., Paolucci, C., Gounder, R., & Flaherty, D. W. (2021). Dioxygen activation kinetics over distinct cu site types in cu-chabazite zeolites. *ACS Catalysis*, 11, 11873–11884.
- 3 Wang, K., Wu, C., Wang, F., Liu, C., Yu, C., & Jiang, G. (2018). In-situ insertion of carbon nanotubes into metal-organic frameworks-derived α -fe₂o₃ polyhedrons for highly sensitive electrochemical detection of nitrite. *Electrochimica Acta*, 285, 128–138.
- 4 Huang, K., Boerhan, R., Liu, C., & Jiang, G. (2017). Nanoparticles penetrate into the multicellular spheroid-on-chip: Effect of surface charge, protein corona, and exterior flow. *Molecular pharmaceuticals*, 14(12), 4618–4627.
- 5 Zhang, C., Zhou, Y., Gu, S., Wu, Z., Wu, W., Liu, C., ... Lee, P. W. et al. (2016). In silico prediction of hERG potassium channel blockage by chemical category approaches. *Toxicology research*, 5(2), 570–582.

Skills

Strengths	■ Curious, hardworking, innovative, and a man of integrity.
Languages	■ Chinese, English
Coding	■ Python, Java, JavaScript
Misc.	■ Comprehensive understanding of matrices, tensors, and topology Machine learning Data analysis Probability