



# 吉林大学 生命科学学院

School of Life Sciences, Jilin University



## 教授

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研究方向:	酶结构与功能的关系 计算机辅助药物设计 计算结构生物学 机器学习	
教育经历:	2002. 9–2007. 6 吉林大学理论化学研究所 博士 1993. 9–1997. 7 东北师范大学化学系 学士	
工作经历:	2015. 12–2016. 12 密苏里大学 访问学者 2014. 10–至今 分子酶学工程教育部重点实验室 教授 2009. 9–2014. 9 分子酶学工程教育部重点实验室 副教授 2007. 7–2009. 9 分子酶学工程教育部重点实验室 讲师 1997. 9–2002. 7 装甲兵技术学院基础部数学室 教员	
研究成果:	1. Jingxuan Zhu, ?Yishuo Lv, ?XiaosongHan, ?Dong Xu*, ?Weiwei Han*. Understanding the differences of the ligand binding/unbinding pathways between phosphorylated and non-phosphorylated ARH1 using molecular dynamics simulations. <i>Sci Rep.</i> ?, 2017, 29;7(1):12439. 2. Qian Mengdan, Shan Yaming, Guan Shanshan, Zhang Hao, Han Weiwei*, Wang Song*. Structural Basis of Fullerene Derivatives as Novel Potent Inhibitors of Protein Tyrosine Phosphatase 1B: Insight into the Inhibitory Mechanism through Molecular Modeling Studies. <i>J Chem Inf Model.</i> ?, 2016, 56(10):2024–2034. 3. Weiwei Han#, ?Jingxuan Zhu, ?Song Wang, ?Dong Xu. Understanding the Phosphorylation Mechanism by Using Quantum Chemical Calculations and Molecular Dynamics Simulations. <i>J Phys Chem B.</i> ?, 2017, 2121(15):3565–3573. 4. Jingxuan Zhu, ?Yan Wang, ?Xin Li, ?Weiwei Han*, Li Zhao*. Understanding the interactions of different substrates with wild-type and mutant acylaminoacyl peptidase using molecular dynamics simulations. <i>J Biomol</i>	

5. Hanyong Jin, Jingxuan Zhu, Yang Dong, Weiwei Han\*. Exploring the different ligand escape pathways in acylaminoacyl peptidase by random acceleration and steered molecular dynamics simulations. Rsc Advances, 2016, 10987–10996.
- 6 Liyun Zou, Jingxuan Zhu, Yang Dong, Weiwei Han\*, Yingjie Guo\*, Hui Zhou \*. Models for the binding channel of wild type and mutant transthyretin with glabridin. Rsc Advances, 2016, 6.
- 7 Shanshan Guan, Li Zhao, Hanyong Jin, Ning Shan, Weiwei Han\*, Song Wang\*, Yaming Shan\*. Binding modes of phosphotriesterase-like lactonase complexed with  $\delta$ -nonanoic lactone and paraoxon using molecular dynamics simulations. J Biomol Struct Dyn. , 2016, 35: 273.
- 8 Hanyong Jin, Zhenhuan Zhou, Dongmei Wang, Shanshan Guan, Weiwei Han \*. Molecular dynamics simulations of acylpeptide hydrolase bound Weiwei Molecular Dynamics Simulations of Acylpeptide Hydrolase Bound to Chlorpyrifosmethyl Oxon and Dichlorvos. Int J Mol Sci., 2015, 16: 6217–6234.
- 9 Dongling Zhan, Shanshan Guan, Hanyong Jin, Weiwei Han \*, Wang Song\*. Stereoselectivity of phosphotriesterase with paraoxon derivatives: a computational study. J Biomol Struct Dyn., ?2016, 34(3):600–11.
- 10 Dongmei Wang, ?Hanyong Jin, ?Junling Wang, ? Shanshan Guan, ?Zuoming Zhang?, Weiwei Han\*. Exploration?of the?chlorpyrifos?escape?pathway?from? acylpeptide?hydrolases?using?steeredmolecular?dynamics?simulations. J Biomol Struct Dyn. ?, 2016, 34(4): 749–761.
- 11 Dongling Zhan, Aixi Bai, Lei Yu, Weiwei Han\*, Feng Yan\*. Characterization of the PH1704 protease from Pyrococcus horikoshii OT3 and the critical functions of Tyr120. Plos One., 2014, 9, e103902.
12. Dongling Zhan, Dongmei Wang, Weihong Min\*, Weiwei Han\*. Exploring the molecular basis for selective binding of homoserine dehydrogenase from Mycobacterium leprae TN toward inhibitors: a virtual screening study. Int J Mol Sci., 2014, 15:1826–1841.
13. Dongling Zhan, Lei Yu, Hanyong Jin, Shanshan Guan, Weiwei Han \*. Molecular modeling and MM-PBSA free energy analysis of endo-1,4- $\beta$ -xyylanase from Ruminococcus albus 8. Int J Mol Sci., 2014, 15: 17284–17303.
14. Han Weiwei#, Exploring the Molecular Basis for Selective Binding of Homoserine Dehydrogenase from Mycobacterium leprae TN toward Inhibitors: A Virtual Screening Study. Int. J. Mol. Sci. , 2014, 15: 1826–1841

15. Dongling Zhan, Zhenhuan Zhou, Shanshan Guan and Weiwei Han \*. The effect of conformational variability of phosphotriesterase upon N-acyl-L-homoserine lactone and paraoxon binding: insights from molecular dynamics studie. *Molecules*, 2013, 18: 15501–15518.
16. Xun Sun, Mengdan Qian, Shanshan Guan, Yaming Shan, Ying Dong, Hao Zhang \*, Song Wang \*, Weiwei Han\*. Investigation of an "alternate water supply system" in enzymatic hydrolysis in the processive endocellulase Cel7A from *Rasamsonia emersonii* by molecular dynamics simulation. *Biopolymers*, 2017, 107:46–61.
17. Dongmei Yan, Weiwei Han, Zehua Dong, Qihui Liu, Zheng Jin, Dong Chu, Yuan Tian, Jinpei Zhang, Dandan Song, Dunhuang Wang, Xun Zhu\*. Homology modeling and docking studies of ENPP4: a BCG activated tumoricidal macrophage protein. *Lipids Health Dis.*, 2016 , 28:15–19.
18. Dongling Zhan, Weiwei Han\*, Yan Feng\*. Experimental and computational studies indicate the mutation of Glu12 to increase the thermostability of oligomeric protease from *Pyrococcus horikoshii*. *J Mol Model.*, 2011, 17:1241 – 1249.
19. Weiwei Han#, Ye Wang, Quan Luo, Yan Feng. Insights into a 3D homology model of arylesterase: the key residues upon protein-ligand docking and MM-PBSA calculations. *J Chem Theory Comput Chem.*, 2011, 10: 165–177.
20. Weiwei Han#, Dongling Zhan, Quan Luo, Yihan Zhou, Yuan Yao, Zesheng Li, Yan Feng. The substrate specificity and the catalytic mechanism of N-carbamyl-D-amino acid amidohydrolase: a theoretical investigation. *Chem Phys Lett.*, 2009, 472: 107–112.
21. Weiwei Han#, Ying Wang, Yihan Zhou, Yuan Yao, Zesheng Li \*, Yan Feng\*. Understanding structural/functional properties of amidase from *rhodococcus erythropolis* by computational approaches. *J Mol Model.*, 2009, 15: 481–487.
22. Weiwei Han#, Dongling Zhan, Xi Zhao, Song Wang.. Computational investigation on the ethylene-induced esterase from *Citrus sinensis*. *Chem. Res in Chinese University.*, 2009, 26(1): 128–135.
23. Yuexi Wang, Ye Wang, Weiwei Han\*, Yan Feng\*. Improving the enzyme sensitivity of the organophosphorous compounds by combining experiment and theory methods. *Chem. Res in Chinese University*, 2012, 28(4): 707–711.
24. Weiwei Han#, Yihan Zhou, Quan Luo, Yuan Yao, Zesheng Li. On the 3D structure and catalytic mechanism study of AmiF formamidase of *Helicobacter pylori*. *Polymer*, 2007, 48: 3726–3731.
25. Weiwei Han#, Yihan Zhou, Yuan Yao, Zesheng Li\*. The Three-dimensional

- structure of Human aurora-C kinase predicted by homology modeling and docking study. *Journal Molecular Struct.* , 2007, 815: 87–93.
26. Weiwei Han#, Yihan Zhou, YuanYao, Zehheng Li\*. Computational studies on bergaptol O-methyltransferase from *Ammi majus* L.: The substrate specificity. *Polymer*, 2006 , 47:7953–7961.
27. Weiwei Han#, Zesheng Li, Qingchuan Zheng, Chiachung Sun. Homology modeling and molecular dynamics studies on the tomato methyl jasmonate esterase. *Polymer*, 2006 , 47:1436–1442.
28. Weiwei Han#, Zesheng Li, Qingchuan Zheng, Chiachung Sun. Toward a blueprint for ?-Primeverosidase from tea leaves structure/function properties:Homology modeling study. *J Chem Theory Comput Chem.* , 2006, 5:433–446.
29. Dongling Zhan, Nan Gao, Weiwei Han, Yan Feng. Quantum Chemistry Calculation of Thermophilic Protease PH1704 Allosteric Center and Mutant Dynamics. *Chem. Res in Chinese University*, 2014, 35(1) : 146–153.
30. Yuan Yao, Weiwei Han, Yihan Zhou, Zesheng Li\*, Qiang Li, Xiaoyan Chen, Dafang Zhong\*. The metabolism of CYP2C9 and CYP2C19 for gliclazide by homology modeling and docking study. *Eur J Med Chem*, 2009, 44:854–861.
31. Quan Luo, Weiwei Han, Yihan Zhou, Yuan Yao, Zesheng Li\*. The 3D Structure of the defense-related rice protein Pir7b predicted by homology modeling and ligand binding studies. *J Mol Model.* , 2008, 14:559–569.
32. Yuan Yao, Weiwei Han, Yihan Zhou, Zesheng Li\*, Qiang Li, Xiaoyan Chen, Dafang Zhong\*. Catalytic Reaction Mechanism of Human Photoreceptor Retinol Dehydrogenase: A Theoretical Study. *J Chem Theory Comput Chem.* , 2008 , 7: 565–578.
33. Yuan Yao, Weiwei Han, Yihan Zhou, Zesheng Li\*. The 3D-Structure and Catalytic Reaction Mechanism of Human Photoreceptor Retinol Dehydrogenase. *Polymer*, 2007, 48: 2644–2648.
34. Yuan Yao, Weiwei Han, Yihan Zhou, Ze-sheng Li\*. Molecular Docking Study of The Affinity of CYP2C9 and CYP2D6 for Imrecoxib. *J Chem Theory Comput Chem.* , 2007, 6:514–548.
35. Chuan Xiao, Chao Sun , Weiwei Han, Feng Pan, Zhu Dan , Yu Li, Zhiguang Song, Yinghua Jin\*. Synthesis of 6-(het) ary Xylocydine analogues and evaluating their inhibitory activities of CDK1 and CDK2 in vitro. *Bloorgan Med Chem.* , 2011, 19: 7100 – 7110.
36. Quan Luo, Yuan Yao, Weiwei Han, Yihan?Zhou, Zesheng?Li\*. ? Homology modeling of a novel epoxide hydrolase (EH) from *Aspergillus niger* SQ-6:

structure-activity relationship in epoxides inhibiting EH activity. J Mol Model., 2009, 15:1125–1132.

项目：

1. 吉林省科技发展计划项目 嗜热内脂酶：基于大分子反应通道的分子设计(3D517G951465)，2017. 1–2019. 12
2. 吉林省重大科技攻关项目 高效有机磷水解酶的制备及其在消除果蔬农药残留中的应用(20140203025NY)，2014. 1–2016.
3. 973计划子课题 几类微生物代谢中的重要酶的结构与催化反应机理的理论研究(2012CB721003)，2012. 1–2016. 12
4. 国家自然科学基金 嗜热寡聚蛋白酶别构调控机理的研究(31070638)，2011. 1–2013. 12
5. 吉林省自然科学基金 磷酸三酯酶的分子改造(201015109)，2011. 1–2013. 12
6. 吉林省教育厅“十二五”科学技术研究项目 碳纳米管和石墨烯诱导嗜热酶对有机磷化合物敏感性的研究，2015. 1–2016. 12

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