



吉林大学 生命科学学院
School of Life Sciences, Jilin University



教授

[教授 \(../szdw/js.htm\)](#)

[副教授 \(../szdw/fjs.htm\)](#)

[讲师 \(../szdw/js1.htm\)](#)

[实验技术人员 \(../szdw/syjsry.htm\)](#)

[离退休人员 \(../szdw/ltxry.htm\)](#)

[首页 \(../index.htm\)](#) > [师资队伍 \(../szdw.htm\)](#) > [教授 \(../szdw/js.htm\)](#) > [生物工程系](#)

[\(../szdw/js/swgcx.htm\)](#) > [正文 \(\)](#)

张作明

姓名:	张作明	
职称:	教授	
最高学位:	博士	
电话:	13504412842	
Email:	zmzhang@jlu.edu.cn	
工作地点:	生命科学楼205室 (V__local/2/DC/4B/34E0D22814991CB58A6AFEE62F5_4D0781DC_1A87. jpg)	
研究方向:	酶的催化机制与改造 天然产物的酶学转化 微生物发掘与应用	
教育经历:	2002.9-2006.7: 吉林大学分子酶学工程教育部重点实验室, 获博士学位; 1999.9-2002.7: 江南大学食品学院, 获硕士学位; 1990.9-1994.7: 吉林工程技术师范学院, 食品工程系, 获学士学位;	
工作经历:	2004.4至今: 吉林大学分子酶学工程教育部重点实验室, 讲师、副教授。 2008.4-2009.7: 美国弗吉尼亚理工大学系统生物学系, 博士后; 1994.7-2004.4: 吉林工程技术师范学院食品工程系, 助教、讲师;	
研究成果:	<p>主要开展了微生物及酶工程领域的研究。基于食品工程、疾病诊断、生物能源及天然产物转化的实际需求, 从极端环境中发掘微生物以及酶资源, 探讨酶活性、稳定性及底物选择性等分子机制; 构建细胞表面展示等筛选技术, 进行酶的定向进化及理性设计研究。承担了国家自然科学基金面上项目、国家重点基础研究发展计划(973计划)、国家高技术研究发展计划(863计划)、吉林省科技厅重点科技攻关项目等。发表SCI收录论文20余篇, 申请发明专利3项, 获得吉林省自然科技进步二等奖一项。</p> <p>发表论文:</p> <ol style="list-style-type: none"> 1. Li Yuwei, Bu Mingwei, Chen Peng, Li Xiaohong, Chen Changwu, Gao Gui, Feng Yan, Han Weiwei, Zhang Zuoming, Characterization of a Thermophilic Monosaccharide Stimulated β-Glucosidase from <i>Acidothermus cellulolyticus</i>, <i>Chemical Research in Chinese Universities</i>, 2018, 34: 212-220; 2. Yuwei Li, Junling Wang, Limei Wang, Hao Tong, Mingwei Bu, Gui Gao, Weiwei Han and Zuoming Zhang, The PT/S-Box of Modular Cellulase AcCell12B Plays a Key Role in the Hydrolysis of Insoluble Cellulose, <i>Catalysts</i> 2018, 8, 123; 3. Huan Zhang, Rui Fei, Baigong Xue, Shanshan Yu, Zuoming Zhang, Sheng 	

- Zhong, Yuanqi Gao and Xiaoli Zhou, Pnserpin: A Novel Serine Protease Inhibitor from Extremophile *Pyrobaculum neutrophilum*, *Int. J. Mol. Sci.* 2017, 18, 113;
4. Rong Liang a, Zuoming Zhang, Songyi Lin, Effects of pulsed electric field on intracellular antioxidant activity and antioxidant enzyme regulating capacities of pine nut (*Pinus koraiensis*) peptide QDHCH in HepG2 cells, *Food Chemistry*, 2017, 237:793 - 802.
 5. Ruiwen Yang, Xingfang Li, Songyi Lin*, Zuoming Zhang*, Feng Chen, Identification of novel peptides from 3 to 10 kDa pine nut (*Pinus koraiensis*) meal protein, with an exploration of the relationship between their antioxidant activities and secondary structure, *Food Chemistry*, 2017, 219:311 - 320.
 6. Junling Wang, Gui Gao, Yuwei Li, Liangzhen Yang, Yanli Liang, Hanyong Jin, Weiwei Han, Yan Feng, Zuoming Zhang, Cloning, Expression, and Characterization of a Thermophilic Endoglucanase, AcCel12B from *Acidothermus cellulolyticus* 11B, *Int. J. Mol. Sci.* 2015, 16, 25080-25095.
 7. Wei Bing, Honglei Wang, Baisong Zheng, Feng Zhang, Guangshan Zhu, Yan Feng, Zuoming Zhang, *Caldicellulosiruptor changbaiensis* sp. nov., a cellulolytic and hydrogen-producing bacterium from a hot spring, *International Journal of Systematic and Evolutionary Microbiology*, 2015, 65:293 - 297.
 8. Yanyan Chen, Dejun Sun, Yulai Zhou, Liping Liu, Weiwei Han, Baisong Zheng, Zhi Wang, Zuoming Zhang, Cloning, Expression and Characterization of a Novel Thermophilic Polygalacturonase from *Caldicellulosiruptor bescii* DSM 6725, *Int. J. Mol. Sci.* 2014, 15, 5717-5729.
 9. Tao Lu, Zuoming Zhang, Chi Zhang, Glycosyl rotation and distortion by key residues in Endocellulase Cel6A from *Theromobifida fusca*, *Glycobiology*, 2014, 24: 247 - 251.
 10. K Wang, J. Tang, Z. Zhang, Y. Gao, G. Chen, Laccase on Black Pearl 2000 modified glassy carbon electrode: Characterization of direct electron transfer and biological sensing properties for pyrocatechol, *Electrochimica Acta* 2012, 70:112 - 117C.
 11. Liu, G. Yang, L. Wu, G. Tian, Z. Zhang, Y. Feng, Switch of substrate specificity of hyperthermophilic acylaminoacyl peptidase by combination of protein and solvent engineering, *Protein and Cells*, 2011, 2:497-506.
 12. J. Cai, Y. Xie, B. Song, Y. Wang, Z. Zhang, Y. Feng. *Fervidobacterium changbaicum* Lip1: identification, cloning, and characterization of the

thermophilic lipase as a new member of bacterial lipase family V. *Appl Microbiol Biotechnol.* 2011, 89(5):1463-73.

13. Q. Li, G. Li, F. Ma, Z. Zhang, B. Zheng and Y. Feng. Highly efficient ring-opening polymerization of caprolactone catalyzed by a recombinant *Escherichia coli* whole-cell biocatalyst. *Process Biochemistry*, 2011, 46(2):477-481.

14. X. Zhang, Z. Zhang, Z. Zhu, N. Sathitsuksanoh Y. Yang, Y.-H. Zhang. The noncellulosomal family 48 cellobiohydrolase from *Clostridium phytofermentans* ISDg: heterologous expression, characterization, and processivity. *Appl. Microbiol. Biotechnol*, 2010, 86(2): 525-533.

15. W. Liu, X. Zhang, Z. Zhang, Y.-H. Zhang, Engineering of *Clostridium phytofermentans* Endoglucanase Cel5A for Improved Thermostability, *Applied and Environmental Microbiology*, 2010, 76:4914-4917.

16. G Yang, A. Bai, L. Gao, Z. Zhang, B. Zheng, Y. Feng. Glu88 in the non-catalytic domain of acylpeptide hydrolase plays dual roles: Charge neutralization for enzymatic activity and formation of salt bridge for thermodynamic stability. *Biochimica et Biophysica Acta (BBA) - Proteins & Proteomics*, 2009, 1794(1): 94-102.

17. J. Ma, Q. Li, B. Song, D. Liu, B. Zheng, Z. Zhang, Y. Feng, Ring-opening polymerization of ϵ -caprolactone catalyzed by a novel thermophilic esterase from the archaeon *Archaeoglobus fulgidus*, *Journal of Molecular Catalysis B: Enzymatic* 56 (2009) 151 - 157

18. Y. Wang, R. Wang, Q. Li, Z. Zhang, Y. Feng, Kinetic resolution of rac-alkyl alcohols via lipase-catalyzed enantioselective acylation using succinic anhydride as acylating agent, *Journal of Molecular Catalysis B: Enzymatic* 56 (2009) 142 - 145

19. Y. Wang, Q. Li, Z. Zhang, J. Ma, Y. Feng, Solvent effects on the enantioselectivity of the thermophilic lipase QLM in the resolution of (R, S)-2-octanol and (R, S)-2-pentanol, *Journal of Molecular Catalysis B: Enzymatic* 56 (2009) 146 - 150

20. Z. Zhang, B. Zheng, Y. Wang, Y. Chen, G. Manco, Y. Feng, The conserved N-terminal helix of acylpeptide hydrolase from archaeon *Aeropyrum pernix* K1 is important for its hyperthermophilic activity. *Biochimica et Biophysica Acta (BBA) - Proteins & Proteomics*, 2008, 1784(9): 1176-1183.

友情链接: 吉林大学 (<http://www.jlu.edu.cn>) | 校内办公 (<http://oa.jlu.edu.cn>) | 图书馆 (<http://lib.jlu.edu.cn>) |
教务系统 (<http://uims.jlu.edu.cn>) | 研究生系统 (<http://gim.jlu.edu.cn>) | 牡丹园 (<http://bbs.jlu.edu.cn>)

版权所有: 吉林大学生命科学学院 2020 © 电话: +(86)-431-85155130 地址: 吉林省长春市前进大街2699号生命
科学楼 邮编: 130012