
◆ 个人概况

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◆ 研究方向：

发酵过程优化与控制

计算机技术与软件专业技术资格高级程序员（软件设计师）

◆ 教育工作经历

2012.05 至今 江南大学 生物工程学院 副教授

2007.09~ 2012.03 江南大学 生物工程学院 发酵工程 博士

2005.09~2007.07 江南大学 生物工程学院 生物化工 硕士

2003.09~2005.07 江南大学 生物工程学院 辅导员

1999.09~2003.07 无锡轻工大学 生物工程学院 生物工程 学士

◆ 科研项目：

1、主持国家自然科学基金（极高细胞密度下乙醇历史积累抑制毕赤酵母表达外源蛋白的分子机制及解抑制策略研究 No. 31301408）；2014. 1-2016. 12

2、主持江苏省自然科学基金（乙醇历史积累抑制毕赤酵母表达蛋白的机制及解抑制策略 No. BK20130122）。2013. 7-2016. 6

3、主持中国博士后科学基金（诱导前比生长速率影响毕赤酵母诱导启动效率的机制研究 No. 2014M551501）；2014. 6-2015. 12

4、主持江南大学自主科研计划-重点项目（高粘度、高密度发酵过程关键技术与装备 JUSRP51632A）2016. 1-2018. 12, 100 万元

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- 5、主持江苏省政策引导类计划(产学研合作)——前瞻性联合研究项目(毕赤酵母高效吸附稀贵金属离子关键技术研发及产业化 BY2016022-15) 2016.7 - 2018.6

◆ 期刊论文

1. Jian Ding, Lu-qiang Jia, Enock Mpofo, **Min-Jie Gao**^{*}, Xi-dong Ren^{*}. An On-line Adaptive Glucose Feeding System Incorporating Patterns Recognition for Glucose Concentration Control in Glutamate Fermentations, *Biotechnology and Bioprocess Engineering*, 2016, 21(6): 758-766
2. **Min-Jie Gao**, Xiao-Bei Zhan, Peng Gao, Xu Zhang, Shi-Juan Dong, Zhen Li, Zhong-Ping Shi, Chi-Chung Lin. Improving performance and operational stability of porcine interferon- α production by *Pichia pastoris* with combinational induction strategy of low temperature and methanol/sorbitol co-feeding. *Applied Biochemistry and Biotechnology*, 2015, 176(2): 493-504.
3. **Min-Jie Gao**, Cheng Wang, Zhi-Yong Zheng, Li Zhu, Xiao-Bei Zhan, Chi-Chung Lin. Improving arachidonic acid fermentation by *Mortierella alpina* through multi-Stage temperature and aeration rate control in bioreactor. *Preparative Biochemistry and Biotechnology*, 2015, DOI: 10.1080/10826068.2015.1031397, 2016, 46(4):360-367.
4. **Min-Jie Gao**, Zhi-Yong Zheng, Jian-Rong Wu, Shi-Juan Dong, Zhen Li, Hu Jin, Xiao-Bei Zhan, Chi-Chung Lin. Improvement of specific growth rate of *Pichia pastoris* for effective porcine interferon- α production with an on-line model based glycerol feeding strategy. *Applied Microbiology and Biotechnology*, 2012, 93(4): 1437-1445.
5. **Min-Jie Gao**, Shi-Juan Dong, Rui-Song Yu, Jian-Rong Wu, Zhi-Yong Zheng, Zhong-Ping Shi, Xiao-Bei Zhan. Improvement of ATP regeneration efficiency and operation stability in porcine interferon- α production by *Pichia pastoris* under lower induction temperature. *Korean Journal of Chemical Engineering*, 2011, 28(6): 1412-1419.
6. **Min-Jie Gao**, Zhen Li, Rui-Song Yu, Jian-Rong Wu, Zhi-Yong Zheng, Zhong-Ping Shi, Xiao-Bei Zhan, Chi-Chung Lin. Methanol/sorbitol co-feeding induction enhanced porcine interferon- α production by *P. pastoris* associated with energy metabolism shift. *Bioprocess and Biosystems Engineering*, 2012, 35(7): 1125-1136.
7. **Min-Jie Gao**, Zhong-Ping Shi. Process control and optimization for heterologous protein productions by methylotrophic *Pichia pastoris*. *Chinese Journal of Chemical Engineering*, 2013, 21(2): 216-226.
8. **Min-Jie Gao**, Xiao-Bei Zhan, Zhi-Yong Zheng, Jian-Rong Wu, Shi-Juan Dong, Zhen Li, Zhong-Ping Shi, Chi-Chung Lin. Enhancing pIFN- α production and process stability in fed-batch culture of *Pichia pastoris* by controlling the methanol concentration and monitoring the responses of OUR/DO levels. *Applied Biochemistry and Biotechnology*, 2013, 171: 1262-1275.

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9. Li-Bo Yang, Xiao-Bei Zhan, Li Zhu, **Min-Jie Gao**, Chi-Chung Lin. Optimization of a low-cost hyperosmotic medium and establishing the fermentation kinetics of erythritol production by *Yarrowia lipolytica* from crude glycerol. *Prep Biochem Biotechnol*, 2016, 46(4): 376-383.
 10. Jian Ding, **Min-Jie Gao**, Guo-Li Hou, Ke-Xue Liang. Effect of ethanol accumulation on porcine interferon- α production by *Pichia pastoris* and activities of key enzymes in carbon metabolism. *Applied Biochemistry and Biotechnology*, 2015, 176:1964-1974.
 11. Jian Ding, **Min-jie Gao**, Guo-li Hou, Ke-xue Liang, Rui-song Yu, Zhen Li, Zhong-ping Shi. Stabilizing porcine interferon- α production by *Pichia pastoris* with an ethanol on-line measurement based DO-Stat glycerol feeding strategy. *Journal of Chemical Technology & Biotechnology*, 2014, 89(12): 1948-1953.
 12. Jian Ding, Chun-ling Zhang, **Min-jie Gao**, Guo-li Hou, Ke-xue Liang, Chun-hua Li, Jian-ping Ni, Zhen Li, Zhong-ping Shi. Enhanced porcine circovirus Cap protein production by *Pichia pastoris* with a fuzzy logic DO control based methanol/sorbitol co-feeding induction strategy. *Journal of Biotechnology*, 2014, 177: 35-44.
 13. 高鹏, 丁健, 张许, 赵玥, 张猛, **高敏杰***, 吴剑荣*, 詹晓北. 乙醇胁迫抑制毕赤酵母表达外源蛋白的转录组学分析. *生物工程学报*. 2016, 32(6): 1-15.

◆ 专利

1. 詹晓北, 郑志永, **高敏杰**, 丁春华. 一种应用于发酵罐的错流导向式搅拌桨. 专利号: ZL201310577861.1
2. 詹晓北, 朱莉, 向荣华, 郑志永, 吴剑荣, **高敏杰**, 张洪涛. 一种瓶载真姬菇的方法. 专利号: ZL201310564418.0
3. **高敏杰**, 詹晓北, 史仲平, 丁健, 杨帅. 一种重组毕赤酵母表达外源蛋白过程的专家控制系统. 专利号: ZL201410767928.2
4. 詹晓北, **高敏杰**, 史仲平, 郑志永, 丁健, 杨帅. 一种基于支持向量机的毕赤酵母发酵过程预警. 专利号: 201410803931.5
5. **高敏杰**, 詹晓北, 史仲平, 丁健, 蒋芸, 潘晴. 一种提高大肠杆菌聚唾液酸产量的专家控制系统. 专利号: ZL201410815552.8
6. **高敏杰**, 洪瀚, 詹晓北, 李志涛, 沈宇峰, 郑志永. 一种利用氯化钙处理毕赤酵母吸附废水中铈离子的方法. 专利申请号: 201611025072.7
7. **高敏杰**, 洪瀚, 詹晓北, 李志涛, 沈宇峰, 郑志永. 一种利用盐酸处理毕赤酵母吸附废水中铈离子的方法. 专利申请号: 201611025002.1