



所属学院 生物工程学院

学科领域 生物工程

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个人简介

副教授，硕导。2012-2013 年美国弗吉尼亚理工大学，访问学者。参与螺旋霉素、吉他霉素、林可霉素和红霉素等抗生素的发酵组分优化，丙酮酸激酶在脱氧核糖核苷酸（dNTP）合成中的应用，利用碳水化合物结合模块研究纤维素表面异质性及对水解速率的影响，等课题。

研究方向

微生物发酵优化及代谢调控，发酵代谢过程的转录调控。擅长工业放线菌（生二素链霉菌，北里链霉菌，林可链霉菌，红霉糖孢菌等）的中试放大与抗生素生产，工业用酶的基因克隆及外源表达（大肠杆菌，枯草芽孢杆菌），底物供给与辅酶平衡等。

研究成果及主要发表文章

1. Zhuang ZH, Zhang LW, Yang CC, Zhu DY, Mao QG, Wang QY and Gao SH*. Enhanced lincomycin A production by calcium gluconate feeding in fermentation of *Streptomyces lincolnensis*. *Bioresources and Bioprocessing*, 2019, 6:31. DOI: 10.1186/s40643-019-0266-4.
2. Yao KY, Gao SH*, Wu YJ, Zhao Z, Wang W, Mao QG. Influence of dextrins on the production of spiramycin and impurity components by *Streptomyces ambofaciens*. *Folia Microbiologica*. 2018, 63 (1): 105-113.
3. Zheng QL, Gao SH*. The effect of surfactant on fermentation of kitasamycin in *Streptomyces kitasatoensis*. *Biotechnology & Applied Biochemistry*. 2016, 63(6):895-900.
4. Gao SH, You C, Renneckar S, Bao J, Zhang YH*. New insights into enzymatic hydrolysis of heterogeneous cellulose by using carbohydrate-binding module 3 containing GFP and carbohydrate-binding module 17 containing CFP. *Biotechnology for Biofuels* 2014, 7:24.
5. Yu WB§, Gao SH§, Yin CY, Zhou Y, Ye BC*. Comparative transcriptome analysis of *Bacillus subtilis* responding to dissolved oxygen in adenosine fermentation. *PLoS ONE*, 2011, 6(5): e20092. doi:10.1371/journal.pone.0020092. □§Coauthor□
6. Gao SH, Bao J*, Gu XM, Xin XJ, Chen CH, Ryu DY. Substrate promiscuity of pyruvate kinase on various deoxynucleoside diphosphates for synthesis of deoxynucleoside triphosphates. *Enzyme and Microbial Technology*, 2008, 43(6):455-459.