

简 历

个人信息			
姓名	盛占武	性别	男
职称	研究员	出生年月	1981.4
单位	中国热带农业科学院农产品加工研究所		
电子邮箱	shengzhanwu100@163.com		
地址	广东省湛江市霞山区社坛路5号		
电话	18907585288	职务	副所长
研究方向			
从事食品加工技术、食品加工过程中有害物质控制及副产物综合利用方面的研究。			
学习&工作经历			
2001.09-2005.06 甘肃农业大学 食品科学与工程 本科/学士			
2005.09-2008.06 西南大学 农产品加工及贮藏工程 研究生/硕士			
2012.09-2018.06 华中农业大学 农产品加工及贮藏工程 博士			
2008.08 至 2023.10 中国热带农业科学院海口实验站			
(期间, 2011.04-2011.10 美国夏威夷大学 访问学者			
2015年1月取得副研究员资格(破格晋升)			
2015.03-2016.03 美国路易斯安那州立大学 访问学者			
2017.04 至 2023.10 中国热带农业科学院海口实验站 副站长			
2020年1月取得研究员资格			
2020.10 至 2022.10 海南省定安县人民政府(中组部派出挂任2年)			
副县长)			
2023.11 至今 中国热带农业科学院农产品加工研究所 副所长			
代表性成果			

论文、专著、专利、品种、标准、承担项目、获奖成果等（每种代表性成果限 5 项）。

论文：

1. Wang, S., Duan, Z., Zheng, L., Yang, Y., Zheng, X., Xiao, D., Ai, B., Wang, M. & **Sheng, Z.** * (2024). Digestive enzyme corona formed in simulated gastrointestinal tract and its impact on EGCG release from banana resistant starch nanoparticles. *Food Hydrocolloids*, 146, 109267.
2. Bo Shen, Lili Zheng, Xiaoyan Zheng, Yang Yang, Dao Xiao, Yiqiang Wang, Zhanwu Sheng, Binling Ai. Insights from meta-analysis on carbon to nitrogen ratios in aerobic composting of agricultural residues[J]. *Bioresource Technology*, 2024, 413: 131416.
3. Wang, S., Zheng, X., Zheng, L., Yang, Y., Xiao, D., Zhang, H., Ai, B., **Sheng, Z.***. k-Carrageenan inhibits the formation of advanced glycation end products in cakes: Inhibition mechanism, cake characteristics, and sensory evaluation, *Food Chemistry* 2023, 429:136583.
4. Zheng, L.; She, M.; Ai, B.; Yang, Y.; Zheng, X.; Wang, S.; Xiao, D.; Jiang, Z.; **Sheng, Z.***, Construction and properties of an amyloid fiber ferulic acid chitosan double network hydrogel and its inhibition of AGEs activity. *Food Hydrocolloids* 2023, 139.
5. Wang, S.; Zheng, L.; Zheng, X.; Yang, Y.; Xiao, D.; Zhang, H.; Ai, B.; **Sheng, Z.***, Chitosan inhibits advanced glycation end products formation in chemical models and bakery food. *Food Hydrocolloids*, 2022, 128.

专利：

- 1 盛占武, 杨旸, 艾斌凌, 郑丽丽, 郑晓燕, 校导; 一种烫染发用茶油发膜及其制作方法和应用. 中国发明专利, ZL201810162022.6 (2020.10.30 授权)
- 2 盛占武, 杨旸, 李晓雷, 艾斌凌, 郑丽丽, 郑晓燕, 校导; 一种黄酮醇-蛋白复合物及其制备方法. 中国发明专利, ZL201810770265.8 (2020.11.17 授权)
- 3 盛占武, 杨旸, 艾斌凌, 郑丽丽, 郑晓燕, 校导; 一种晒后修复用精制茶油、精华液、面膜及其制备方法, 中国发明专利, ZL201810159392.4 (2021.3.5 授权)
- 4 盛占武;校导;艾斌凌;郑晓燕;郑丽丽;杨旸;钟爽: 一种埃洛石-生物炭复合材料的制备方法.中国发明专利, ZL202110101099.4 (2023.3.17 授权)
- 5 盛占武; 郑晓燕;杨旸;艾斌凌;郑丽丽;王申宛;校导: 一种香蕉花多糖的提取及其对晚期糖基化终末产物的抑制作用, 中国发明专利, ZL202211668484.8 (2024.8.13 授权)

项目：

- 1 国家自然科学基金面上项目, 基于纳米尺度研究香蕉花多酚- β 乳球蛋白纳米颗粒抑制食品中 AGEs 形成的理论基础(31772096), 2019.01-2022.12, 国家基金委, 中国热带农业科学院海口实验站, 60 万元, 主持;
- 2 农业农村部部门预算项目, 热带特色富民作物产业减损增效技术集成试验示范(125163014), 2024.03-2025.12, 农业农村部, 中国热带农业科学院海口实验站, 247 万元, 主持;
- 3 热带农业青年英才杰出人才项目, 1630092023002, 2022-01-05~ 2025-12-31, 中国热带农业科学院海口实验站, 院级, 150 万元, 主持;
- 4 抗蛋白吸附纳米颗粒的构建及其抑制食品 AGEs 形成的作用机制 KJRC2023C26, 2024-01-01 至 2026-12-31, 海南省科技厅, 中国热带农业科学院海口实验站, 100 万元, 主持;
- 5 基于双网络凝胶抑制食品中 AGEs 形成的作用机制 320CXTD440, 2020-12-26 至 2023-12-25, 海

南省科技厅，中国热带农业科学院海口实验站，30 万元，主持。

科技奖励：

1. 2024 年，基于瞬时弹射式蒸汽爆破的香蕉茎秆组分分离与利用新技术，获海南省技术发明一等奖，排名第一；
2. 2023 年，海南油茶传统加工提质增效关键技术研发与集成应用，海南省科技进步二等奖，排名第一；
3. 2017 年团队“香蕉重要性状调控与副产物利用创新团队”获神农中华农业科技奖创新团队奖，排名第二；
4. 2014 年成果“香蕉雄花、茎秆和残次果等废弃物高值化综合利用技术研究 与示范”获海南省科技进步一等奖，排名第一；
5. 2014 年成果“香蕉雄花、茎秆和残次果等废弃物高值化综合利用技术研究 与示范”获海口市科技进步一等奖，排名第一。

标准：

- 1 2013 年，香蕉纤维清洁脱胶技术规范，中华人民共和国农业行业标准，NY/T 2265-2012，排名第二。

人才称号：

- 2024 年，海南省委重点联系服务专家
- 2022 年，首批国家神农青年英才
- 2021 年，中国农学会青年科技奖
- 2021 年，中国热科院杰出人才
- 2020 年，海南省领军人才
- 2019 年，海南省南海名家
- 2016 年，首批农业农村部杰出青年农业科学家

CURRICULUM VITAE

Personal Information			
Name	Zhanwu Sheng	Gender	Male
Position Title	Professor		
Institute	Agricultural products processing research institute, Chinese Academy of Tropical Agricultural Sciences (CATAS)		
Email	shengzhanwu100@163.com		
Address	No.5 Shetan Road, Xiashan District, Zhanjiang City, Guangdong, Province P.R. China. 524013		
Tel	18907585288	Fax	
Research Interest			
Conduct research on food processing technology, control of harmful substances during food processing, and comprehensive utilization of tropical crop by-products.			
Education & Working Experience			
Education			
College			
College of food science, Gansu Agricultural University Major: Food Science (from September 1, 2001 to June 30, 2005)			
Master			
College of food science, Southwest University Major: Food Science (from September 1, 2005 to June 30, 2008)			
PhD			
College of food science, Huazhong Agricultural University Major: Processing and Storage of Agricultural Products (from September 1, 2012 to June 30, 2018)			
Working			
Haikou Experimental Station, Chinese Academy of Tropical Agricultural Sciences (from August 2008 to October 2023,)			
During this period:			
(From April 2011 to October 2011, a visiting scholar at the University of Hawaii, USA.			
Obtain the qualification of associate researcher in January 2015 (exceptionally promoted).			
From March 2015 to March 2016, a visiting scholar at Louisiana State University, USA.			

From April 2017 to October 2023, Deputy Director of the Haikou Experimental Station of the Chinese Academy of Tropical Agricultural Sciences.

Obtain the qualification of researcher in January 2020.

From October 2020 to October 2022, Deputy County Head of Ding'an County People's Government of Hainan Province (assigned by the Organization Department of the CPC Central Committee for a two-year term).

Since November 2023, Deputy Director at the Institute of Agricultural Product Processing, Chinese Academy of Tropical Agricultural Sciences.

Representative Result

Paper:

1. Wang, S., Duan, Z., Zheng, L., Yang, Y., Zheng, X., Xiao, D., Ai, B., Wang, M. & **Sheng, Z.** * (2024). Digestive enzyme corona formed in simulated gastrointestinal tract and its impact on EGCG release from banana resistant starch nanoparticles. *Food Hydrocolloids*, 146, 109267.
2. Bo Shen, Lili Zheng, Xiaoyan Zheng, Yang Yang, Dao Xiao, Yiqiang Wang, Zhanwu Sheng, Binling Ai. Insights from meta-analysis on carbon to nitrogen ratios in aerobic composting of agricultural residues[J]. *Bioresource Technology*, 2024, 413: 131416.
3. Wang, S., Zheng, X., Zheng, L., Yang, Y., Xiao, D., Zhang, H., Ai, B., **Sheng, Z.***. k-Carrageenan inhibits the formation of advanced glycation end products in cakes: Inhibition mechanism, cake characteristics, and sensory evaluation, *Food Chemistry* 2023, 429:136583.
4. Zheng, L.; She, M.; Ai, B.; Yang, Y.; Zheng, X.; Wang, S.; Xiao, D.; Jiang, Z.; **Sheng, Z.***, Construction and properties of an amyloid fiber ferulic acid chitosan double network hydrogel and its inhibition of AGEs activity. *Food Hydrocolloids* 2023, 139.
5. Wang, S.; Zheng, L.; Zheng, X.; Yang, Y.; Xiao, D.; Zhang, H.; Ai, B.; **Sheng, Z.***, Chitosan inhibits advanced glycation end products formation in chemical models and bakery food. *Food Hydrocolloids*, 2022, 128.

Patent:

1. Zhanwu Sheng, Yang Yang, Binling Ai, Lili Zheng, Xiaoyan Zheng, Xiaodao. A kind of tea oil hair mask for hair dyeing and its preparation method and application. Chinese Invention Patent, ZL201810162022.6 (Granted on October 30, 2020)
2. Zhanwu Sheng, Yang Yang, Xiaolei Li, Binling Ai, Lili Zheng, Xiaoyan Zheng, Xiaodao. A kind of flavonol-protein complex and its preparation method. Chinese Invention Patent, ZL201810770265.8 (Granted on November 17, 2020)
3. Zhanwu Sheng, Yang Yang, Binling Ai, Lili Zheng, Xiaoyan Zheng, Xiaodao. A kind of refined tea oil, essence, mask for post-sun repair and its preparation method. Chinese Invention Patent, ZL201810159392.4 (Granted on March 5, 2021)
4. Zhanwu Sheng; Xiaodao; Binling Ai; Xiaoyan Zheng; Lili Zheng; Yang Yang; Shuang Zhong. A method for preparing halloysite-biochar composite material. Chinese Invention Patent, ZL202110101099.4 (Granted on March 17, 2023)
5. Zhanwu Sheng; Xiaoyan Zheng; Yang Yang; Binling Ai; Lili Zheng; Shenwan Wang; Xiaodao. A method for extracting polysaccharides from banana flowers and its inhibitory effect on advanced glycation end products. Chinese Invention Patent, ZL202211668484.8 (Granted on August 13, 2024)

Project:

1. Zhanwu sheng et al, National natural science foundation of China, Theoretical principle of banana flower polyphenols nanoparticles encapsulated by beta-lactoglobulin for inhibiting AGEs in foods based on nano-dimension. 2019-2022, RMB600,000.
2. Zhanwu Sheng et al, Technological and service support for agricultural production “Integrated experimental demonstration of technology for reducing losses and increasing efficiency in tropical characteristic-rich cash crop industries” 2024-2025, RMB2470,000.
3. Zhanwu Sheng et al, the Central Public-Interest Scientific Institution Basal Research Fund of CATAS “Formation mechanism of starch/protein-polyphenol nanoparticles and its inhibition of food AGEs” . 2021-2025, RMB1500,000.
4. Zhanwu Sheng et al, Hainan Province Science and Technology Talent Innovation Project “Construction of Anti-Protein Adsorption Nanoparticles and Their Mechanism for Inhibiting Food AGEs Formation” 2024-2026, RMB1000,000.
5. Zhanwu Sheng et al, Hainan Provincial Natural Science Foundation Innovation Research Team Project “Mechanism of Inhibiting AGEs Formation in Food Based on Double Network Gel” , 2020-2023, RMB300,000.

Research Awards:

1. In 2024, The new technology for component separation and utilization of banana stalks based on instantaneous ejection steam explosion, **The first prize** of Hainan Provincial Technological Invention Award, **ranking first**.
2. In 2023, Key technologies for improving the quality and efficiency of traditional processing of camellia seed oil of Hainan and their integrated application, **The second prize** of Hainan Provincial Scientific and Technological Progress Award, **ranking first**.
3. In 2017, The team "Banana Important Trait Regulation and By-product Utilization Innovation Team" , The Shennong Zhonghua Agricultural Science and Technology Award for **Innovation Teams**, **ranking second**.
4. In 2014, Research and Demonstration of High-value Comprehensive Utilization Technology for Banana Male Flowers, Stalks, and Inferior Fruits and Other Wastes, **The first prize** of Hainan Provincial Scientific and Technological Progress Award, **ranking first**.
5. In 2014, Research and Demonstration of High-value Comprehensive Utilization Technology for Banana Male Flowers, Stalks, and Inferior Fruits and Other Wastes, **The first prize** of Haikou City Scientific and Technological Progress Award, **ranking first**.

Standard:

1. In 2013, Technical specification for banana raw fiber pollution-free degumming, The agricultural industry standard of the People's Republic of China, NY/T 2265-2012, **ranked second**.