

## Prof. Wei-Cai Zeng PH. D.

Antioxidant Polyphenols Team, Department of Food Engineering, Sichuan University  
Chengdu 610065, P. R. China

---

### EDUCATION

*Sichuan University, Chengdu, P. R. China*

**Doctor Degree**

**2011**

Major: Food Science

*Sichuan University, Chengdu, P. R. China*

**Master Degree**

**2008**

Major: Food Science

*Sichuan University, Chengdu, P. R. China*

**Bachelor Degree**

**2005**

Major: Food Science and Technology

---

### AWARDS

• Academic Award for Distinguished Doctor, Ministry of Education, China

**2014**

• Outstanding Researcher Award, Sichuan University

**2012**

---

### RESEARCH EXPERIENCE

*Department of Food Engineering, Sichuan University, Chengdu, P. R. China*

Professor, Head of the Teaching and Research Section

**2014-**

---

### LANGUAGES

• English

• Chinese

---

### MEMBERSHIPS

• Chinese Institute of Food Science and Technology

• China Animal Product Processing Research Institute

• Sichuan Nutrition Society

---

### RESEARCH WORK

More than 80 academic research papers have been published, including 33 SCI (total IF>80) and 2 authorized national invention patents. The main research areas are food chemistry.

#### Some English Publications:

[1] Hao-Xiang Gao, Zheng He, Qun Sun, Qiang He, **Wei-Cai Zeng\***. A functional polysaccharide film forming by pectin, chitosan, and tea polyphenols [J]. *Carbohydrate Polymers*, 2019, 215: 1-7.

[2] Mai-Rui Gao, Qian-Da Xu, Qiang He, Qun Sun, **Wei-Cai Zeng\***. A theoretical and experimental study: the influence of different standards on the determination of total phenol content in the Folin-Ciocalteu assay [J]. *Journal of Food Measurement and Characterization*, 2019, 13(2): 1349-1356.

[3] Shaobo Li, **Wei-Cai Zeng**, Ruolin Li, Louwrens C. Hoffman, Zhifei He, Qun Sunb, Hongjun Li. Rabbit meat production and processing in China [J]. *Meat Science*, 2018, 145: 320-328.

[4] Hao-Xiang Gao, Zhi-Long Yu, Qiang He, Shan-Hu Tang, **Wei-Cai Zeng**\*. A potentially functional yogurt co-fermentation with *Gnaphalium affine* [J]. *LWT-Food Science and Technology*, 2018, 91: 423-430.

[5] Zhilong Yu, Lin Sun, Wei Wang, **Wei-Cai Zeng**, Azlin Mustapha, Mengshi Lin. Soy protein-based films incorporated with cellulose nanocrystals and pine needle extract for active packaging [J]. *Industrial Crops & Products*, 2018, 112: 412-419.

[6] Xia Li, **Wei-Cai Zeng**, De-Yi Zhu, Jiang-Ling Feng, Cui-Cui Tian, Xue-Pin Liao, Bi Shi. Investigation of collagen hydrolysate used as carbon and nitrogen source in the fermentation of *Bacillus pumilus* [J]. *Process Biochemistry*, 2017, 55: 11-16.

[7] **Wei-Cai Zeng**, Qun Sun, Wen-Hua Zhang, Xue-Pin Liao, Bi Shi. Antioxidant activity *in vivo* and biological safety evaluation of a novel antioxidant peptide from bovine hair hydrolysates [J]. *Process Biochemistry*, 2017, 56: 193-198.

[8] Zhi-Long Yu, **Wei-Cai Zeng**, Wen-Hua Zhang, Xue-Pin Liao, Bi Shi. Effect of ultrasonic pretreatment on kinetics of gelatin hydrolysis by collagenase and its mechanism. *Ultrasonics Sonochemistry*, 2016, 29: 495-501.

[9] **Wei-Cai Zeng**, Wen-Ting Wen, Yue Deng, Yuan-Yuan Tian, Hong-Hu Sun, Qun Sun. Chinese ethnic meat products: continuity and development. *Meat Science*, 2016, 120: 37-46.

[10] Zhi-Long Yu, Hao-Xiang Gao, Zeng Zhang, Zheng He, Qiang He, Li-Rong Jia, **Wei-Cai Zeng**\*. Inhibitory effects of *Ligustrum robustum* (Roxb.) Blume extract on  $\alpha$ -amylase and  $\alpha$ -glucosidase. *Journal of Functional Foods*, 2015, 19: 204-213.

[11] Yue Yu, **Wei-Cai Zeng**, Ya-Nan Wang, Bi Shi. Inhibitory effect of protein filling agent from bovine hair on the oxidation of Cr(III). *Journal of the American Leather Chemists Association*, 2015, 110: 385-391.

[12] **Wei-Cai Zeng**, Wen-Hua Zhang, Qiang He, Bi Shi. Purification and characterization of a novel antioxidant peptide from bovine hair hydrolysates. *Process Biochemistry*, 2015, 50: 948-954.

[13] **Wei-Cai Zeng**, Zeng Zhang, Li-Rong Jia. Antioxidant activity and characterization of antioxidant polysaccharides from pine needle (*Cedrus deodara*). *Carbohydrate Polymers*, 2014, 108: 58-64.

[14] Zhi-Long Yu, Zeng Zhang, **Wei-Cai Zeng**\*. Investigation of antibrowning activity of pine needle (*Cedrus deodara*) extract with fresh-cut apple slice model and identification of the primary active components. *European Food Research and Technology*, 2014, 239: 669-678.

[15] Zhi-Long Yu, **Wei-Cai Zeng**, Wen-Hua Zhang, Xue-Pin Liao, Bi Shi. Effect of ultrasound on the activity and conformation of  $\alpha$ -amylase, papain and pepsin. *Ultrasonics Sonochemistry*, 2014, 21: 930-936.

[16] **Wei-Cai Zeng**, Wen-Chang Zhang, Wen-Hua Zhang, Qiang He, Bi Shi. The antioxidant activity and active component of *Gnaphalium affine* extract. *Food and Chemical Toxicology*, 2013, 58: 311-317.

[17] **Wei-Cai Zeng**, Wen-Chang Zhang, Wen-Hua Zhang, Bi Shi. Antioxidant activity and characterization of bioactive polypeptides from bovine hair. *Reactive & Functional Polymers*, 2013, 73: 573-578.

[18] Zhi-Long Yu, **Wei-Cai Zeng**, Xiao-Li Lu. Influence of ultrasound to the activity of tyrosinase. *Ultrasonics Sonochemistry*, 2013, 20: 805-809.

[19] Zhi-Long Yu, **Wei-Cai Zeng**. Antioxidant, antibrowning, and cytoprotective activities of *Ligustrum robustum* (Roxb.) Blume extract. *Journal of Food Science*, 2013, 78: C1354-C1362.

[20] **Wei-Cai Zeng**, Zeng Zhang, Hong Gao, Li-Rong Jia, Wu-Yong Chen. Characterization of antioxidant polysaccharides from *Auricularia auricular* using microwave-assisted extraction. *Carbohydrate Polymers*, 2012, 89: 694-700.

[21] **Wei-Cai Zeng**, Qiang He, Qun Sun, Kai Zhong, Hong Gao. Antibacterial activity of water-soluble extract from pine needles of *Cedrus deodara*. *International Journal of Food Microbiology*, 2012, 153: 78-84.

[22] **Wei-Cai Zeng**, Zeng Zhang, Hong Gao, Li-Rong Jia, Qiang He. Chemical composition, antioxidant and antimicrobial activities of essential oil from pine needle (*Cedrus deodara*). *Journal of Food Science*, 2012, 77: C824-C829.

[23] Yong-Wei Wang, **Wei-Cai Zeng**, Pei-Yu Xu, Ya-Jia Lan, Rui-Xue Zhu, Kai Zhong, Yi-Na Huang, Hong Gao. Chemical composition and antimicrobial activity of the essential oil of kumquat (*Fortunella crassifolia* Swingle) Peel. *International Journal of Molecular Sciences*, 2012, 13: 3382-3393.

[24] **Wei-Cai Zeng**, Hong Gao, Jia-Qi Cen, Yan Zhang, Li-Rong Jia, Su Feng, Yi-Na Huang. Antibrowning and antimicrobial activities of the water-soluble extract from pine needles of *Cedrus deodara*. *Journal of Food Science*, 2011, 76: C318-C323.

[2] **Wei-Cai Zeng**, Rui-Xue Zhu, Li-Rong Jia, Hong Gao, Yue Zheng, Qun Sun. Chemical composition, antimicrobial and antioxidant activities of essential oil from *Gnaphalium affine*. *Food and Chemical Toxicology*, 2011, 49: 1322-1328. (SCI)

[3] Rui-Xue Zhu, Kai Zhong, **Wei-Cai Zeng**, Xue-Yun He, Xue-Quan Gu, Zhi-Feng Zhao, Hong Gao. Essential oil composition and antibacterial activity of *Zanthoxylum bungeanum*. *African Journal of Microbiology Research*, 2011, 26: 4631-4637.

- [4] Su Feng, **Wei-Cai Zeng**, Fan Luo, Jian Zhao, Zhirong Yang, Qun Sun. Antibacterial activity of organic acids in aqueous extracts from pine needles(*Pinus massoniana* Lamb.). *Food Science and Biotechnology*, 2010 , 19: 35-41. (**SCI**)
- [5] Yi-Na Huang, Ying-Lan Zhao, Xiao-Ling Gao, Zhi-Feng Zhao, Zan Jing, **Wei-Cai Zeng** et al. Intestinal  $\alpha$ -glucosidase inhibitory activity and toxicological evaluation of *Nymphaea stellata* flowers extract. *Journal of Ethnopharmacology*, 2010, 131: 306-312.