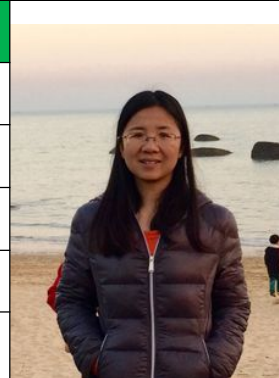


CURRICULUM VITAE

Personal Information			
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Research Interest			
<ul style="list-style-type: none">● New coating material on cleaned eggs● Developments of novel metallic or hybrid nanoparticles, semiconductor quantum dots, magnetic or photoactive nanomaterials for biosensing.● The study of structure-function of egg bioactive proteins/peptides			
Professional Memberships			
Executive director of Asian Egg Association			
Other Roles			
Education & Working Experience			
<ul style="list-style-type: none">● From May 2015 to present Associate Professor in College of Food Science and Technology Huazhong Agricultural University● From May 2014 to May 2015: Visiting scholar in Oregon State University● From Jul 2010 to May 2014 : Associate Professor in College of Food Science and Technology Huazhong Agricultural University● From Jul 2007 to Jun 2010 , Lecturer in College of Food Science and Technology , Huazhong Agricultural University● From Sep 2004 to Jun 2007 ,College of Chemistry, Nankai University, Ph.D. in Analytical Chemistry			



Publications

1. Qi Wang, Yongguo Jin, Xing Fu, Meihu Ma, **Zhaoxia Cai*** A "Turn-on-off-on" fluorescence switch based on quantum dots and gold nanoparticles for discriminative detection of ovotransferrin, *Talanta*, 2016, 150, 407–414
2. Beibei Wang, Qi Wang, **Zhaoxia Cai***, Meihu Ma*, Simultaneous, rapid and sensitive detection of three food-borne pathogens using multicolor quantum dot probes based on multiplex fluorescence immunoassay *LWT - Food Science and Technology*, 2015, 61, 368-376
3. Beibei Wang, Qi Wang, YongGuo Jin, MeiHu Ma, **ZhaoXia Cai*** Two-color quantum dots-based fluorescence resonance energy transfer for rapid and sensitive detection of Salmonella on eggshells *Journal of Photochemistry and Photobiology A: Chemistry* 2015, 299, 131-137
4. Chenyao Tong, Fang Geng, Zhenjiao He, **Zhaoxia Cai***, Meihu Ma* A simple method for isolating chicken egg yolk immunoglobulin using effective delipidation solution and ammonium sulfate *Poultry Science* 2015, 94(1), 104-110
5. Beibei Wang, Qi Wang, Meihu Ma, **Zhaoxia Cai*** The inhibition of fluorescence resonance energy transfer between multicolor quantum dots for rapid and sensitive detection of Staphylococcus aureus *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 2015, 135, 428–434
6. XiaoJuan Ruan, Beibei Wang, MeiHu Ma, AiZhen Guo, **ZhaoXia Cai*** Application of water-soluble ZnSe quantum dots on rapid and sensitive detection of MPB83 protein on the surface of Mycobacterium bovis *Chinese Journal of Analytical Chemistry*, 2014, 42 (5) 643-647
7. Beibei Wang, Cuiping Nie, Huan Shang, Qi Wang, Meihu Ma, **Zhaoxia Cai*** A novel two-step controlled basic water phase method for synthesizing size-tunable CdTe/Cd(OH)₂ core/shell quantum dots with high quantum yield and excellent stability *Journal of Luminance*, 143 (2013) 262–270
8. Beibei Wang, Xi Huang, Meihu Ma, Qing Shi, **Zhaoxia Cai*** A simple quantum dot-based fluoroimmunoassay method for selective capturing and rapid detection of Salmonella on eggs *Food control*, 2014,35,26–32
9. **Cai, ZX**, Baoqin Shi, Lei Zhao, Meihu Ma Ultrasensitive and rapid lead sensing in water based on environmental friendly and high luminescent l-glutathione-capped-ZnSe quantum dots *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 2012, 97, 909–914
10. **Cai, ZX**, Guoxiang Chen, et al Determination of lysozyme at the nanogram level in chicken egg white using Resonance Rayleigh-scattering method with Cd-doped ZnSe quantum dots as probe *Sensors and Actuators B: Chemical* 157 (2011) 368– 373
11. **Cai, ZX**, Yu HF, Ma, MH Determination of lysozyme at the nanogram level in food sample using Resonance

- Rayleigh-scattering method with Au nanoparticles as probe *Spectrochimica Acta Part A* 78 (2011) 1266–1271
12. **Cai ZX**, Chen YJ, Yan XP Facile size-controllable aqueous synthesis of water soluble CdTe/Cd(OH)₂ core/shell nanoparticles with tunable optical property, high quantum yield and good stability *Chin. J. Chem.*, 2008, 26(10), 1848 - 1852.
 13. **Cai ZX**, Yang H, Zhang Y, Yan XP Preparation, characterization and evaluation of water-soluble-cysteine-capped-CdS nanoparticles as fluorescence probe for detection of Hg(II) in aqueous solution *Anal. Chim. Acta*, 2006, 559, 234–239
 14. **Cai ZX**, Yan XP In situ electrostatic assembly of CdS nanoparticles onto aligned multiwalled carbon nanotubes in aqueous solution *Nanotechnology*, 2006, 17, 4212–4216
 15. **Cai ZX**, Song GW*, Li L, et al. Determination of nucleic acid by a resonance light-scattering technique with fluorescein *Chin. J. Anal. Chem.* 2004, 32 (5): 647-650
 16. Wu Xiao-fen; **Cai Zhao-xia**; Sun Shu-guo; Investigation of Interaction between Riboflavin and Riboflavin Binding Protein by Fluorescence Spectroscopy *Spectroscopy and Spectral Analysis* 2012, 32, 719-722
 17. Shi, BQ; **Cai, ZX**; Ma, MH A Facile Colloid Aqueous Method for Synthesis of Water Soluble ZnSe Quantum Dots with High Fluorescence and Stability Characterization *Spectroscopy and Spectral Analysis* 2010, 30 (3) 720-724
 18. Qiu Ning, Ma MH, **ZX Cai** Proteomic analysis of egg white proteins during the early phase of embryonic development *Journal of Proteomics* 2012, 75, 1895-1890
 19. Liu, LL; Ma, MH; **Cai, ZX**, et al. Purification and Properties of a Collagenolytic Protease Produced by *Bacillus cereus* MBL13 Strain: *Food Technology and Biotechnology* 2010, 48 (2) 151-160
 20. Huang Qun; Ma Mei-hu; **Cai Zhao-xia**; Effect of S-Configuration Transformation on the Microstructure of Ovalbumin *Spectroscopy and Spectral Analysis* 2011, 31, 3319-3322
 21. Song GW*, He Y, **Cai ZX**, et al. The fluorescence studies of interaction between 4-(n-2'-glucosyl) acetamidyl triphenyl phosphonium chloride and DNA *Anal. Lett.* 2005, 38 (3): 441-451
 22. Song GW*, He Y, **Cai ZX** A fluorescence spectroscopic study of the interaction between norfloxacin and DNA *Can. J. Anal. Sci. Spectros.* 2004, 49 (4): 203-209
 23. Song GW*, He Y, **Cai ZX** The interaction between levofloxacin hydrochloride and DNA mediated by Cu²⁺ *Journal of Fluorescence* 2004, 14 (6): 705-710
 24. Song GW*, Li L, **Cai ZX**, et al. Fluorometric determination of DNA using a nucleic acid probe Ru(bpy)₃(2)PIP(VI) *Can. J. Anal. Sci. Spectros.* 2004, 49 (2): 73-77
 25. Fang GR, Li L, **Cai ZX**, et al. Synthesis of mixed complexes of lanthanum with 2,2-bipyridyl and

1,10-phenanthroline and Study of the Interaction of the complexes with DNA Spectroscopy and Spectral Analysis 2004,24 (3): 327-329

26. Shuguo Sun, Xi Huang, Meihu Ma, Ning Qiu, **Zhaoxia Cai**, Zhang Luo, Nichia Primadani Alies Systematic evaluation of avidin–biotin interaction by fluorescence spectrophotometry Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 89, 2012, 99–104
27. Sun, SG ; Ma, MH ; Qiu, N; Huang, X; **Cai, ZX** ; Huang, Q ; Hu, X Affinity adsorption and separation behaviors of avidin on biofunctional magnetic nanoparticles binding to iminobiotin COLLOIDS AND SURFACES B-BIOINTERFACES 2011, 88, 246-253
28. X Huang, YH Zhou, MH Ma, **ZX Cai**, T Li Chemiluminescence Evaluation of Antioxidant Activity and Prevention of DNA Damage Effect of Peptides Isolated from Soluble Eggshell Membrane Protein Hydrolysate J. Agric. Food Chem. 2010, 58, 12137–12142

Additional Information

Patents

1. Xiuping Yan, **Zhaoxia Cai**, et al., Public CN No.1927994; Title "Preparation of water soluble core/shell CdTe/Cd (OH)₂ semiconductor nanocrystal based on aqueous phase".
2. **Zhaoxia Cai**, Beibei Wang, Meihu Ma. Title "The method of core-shell structure of quantum dot solution ". Application number: 201210533682.3.
3. Meihu Ma, **Zhaoxia Cai**, Tao Li, Yanhua Zhou, Fang geng. Title "The method of preparation of calcium propionate using egg shell". Application number: 2012101282203.
4. Meihu Ma, **Zhaoxia Cai**, Shuai Zhang, Juan Zuo, Xu Cao. Title " The preparation for the type of natural emulsion antistaling agent for egg coating". Application number: 2012102077901.
5. Meihu Ma, Wei Xiong, **Zhaoxia Cai**, Xing Fu. Title " Synthesis methods of composite metal oxide catalyst and ethylene oxide high fatty alcohol". Application number:2012102971519 .
6. Meihu Ma, Xing Fu, **Zhaoxia Cai**, Shugang Li. Title " New type of epoxy ethane senior fatty alcohol antistaling agent for eggs coating". Application number:2012103595946 .

Books and Standards Edited

1. **Cai, ZX** /Editor/2013: Egg processing technology China Agriculture Press
2. **Cai, ZX**/Editor/2012:Operating practice for cleaned eggs in circulating (SB/T 10640-2011)

3. **Cai, ZX**/Editor/2012: The classification and codes of eggs and egg products (SB/T 10639-2011)
4. Jin YG, **Cai, ZX**/Editor/2013: Fresh eggs packaging and labeling (SB/T 10895-2012)

Honors & Awards

1. One of ten national young outstanding scientists of Egg Processing by Animal Products Processing Committee of China,2013
2. Top-10 Most Cited Articles during 2005-2010, Elsevier Ltd, Oxford, UK, 2011
3. Excellent young college teacher of “Zhang Tang Zhi” by Huazhong Agriculture University, 2013
4. Analyses Tested the Association of science and Technology Award by CAIA,2008