

Xu Gaixia

Gaixia Xu is currently a professor of Key Laboratory of Optoelectronic Devices and Systems of Ministry of Education and Guangdong Province, College of Optoelectronic Engineering of Shenzhen University. Her research interests include biophotonics and nanomedicine.

Bachelor degree in 2000 Changchun Institute of Optics and Fine Mechanics Institute of Biomedical Engineering, in 2005 PhD in Biomedical Engineering, Zhejiang University, 2005 - 2007 at the Institute of Optoelectronics, Shenzhen University postdoctoral research work, the main research areas of optical methods Biomedical Research, 2007--2008 postdoctoral research work in the United States Buffalo, New York campus, the main research biomedical application of fluorescent nanoparticles. May 2008 into the Shenzhen University School of Optoelectronic Engineering (Optoelectronics Research Institute) work, mainly engaged in bio-photonics and nano-medical research.

Contact information

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work experience

2008.7- date Shenzhen University, Research Associate

2007.4-2008.5 State University of New York at Buffalo, postdoctoral

2005.3-2007.3 Institute of Optoelectronics, Shenzhen University, postdoctoral

Education and experience

2000.9-2005.3 Zhejiang University, Biomedical Engineering, Ph.D.

1996.9-2000.7 Changchun Institute of Optics and Fine Mechanics, Bachelor

Research Interests

§ Biomedical applications of nanomaterials

§ Biomedical research, new imaging methods

Honors and Awards

Shenzhen high-level professionals (local level)

Research projects

§ Hosted by the National Natural Science Foundation of China (30900335): CdTe / ZnTe quantum dots and molecular mechanisms of reproductive toxicity study, 2010.01-2012.12

§ Presided over the Ministry of Education Fund Project (Education Division left outside [2010] No. 1561): Synthesis and Fluorescence targeting reproductive toxicity study quantum dots, 2011.04-2013.04

§ Presided over the Guangdong Natural Science Foundation (2008078): fluorescent magnetic multifunctional nanomaterials cell invasion characteristics and toxicity studies, 2008.10-2010.10

§ He presided over the Guangdong Science and Technology Innovation Project (2012KJCX0094): fluorescent nanoprobe targeted synthesis and oocyte developmental toxicity study, 2013.01-2014.12

§ Hosted by the National Postdoctoral Science Foundation (2005038276): tissue autofluorescence for early diagnosis of cancer of the complex multi-parameter measurement and imaging technology research, 2005.12-2007.04

§ Shenzhen chaired Basic Research Program (JC201005280500A): Fluorescent Nanoparticles for three-dimensional cultured and mechanism of follicular development, 2011.01-2012.12

Representative Results (past three years)

[1] Lin Guimiao, Hu Rui, Law Wing -Cheung, Chen Chih-Kuang, Wang Yucheng, Chin Hui Li, Nguyen Quoc Toan, Lai Cheng Kee, Yoon Ho Sup, Wang Xiaomei, Xu Gaixia, Ye Ling, Cheng Chong and Yong Ken- Tye. Biodegradable Nanocapsules as siRNA Carriers for Mutant K-Ras Gene Silencing of Human Pancreatic Carcinoma Cells. *Small*, doi: 10.1002 / smll 201201716, 2013. (SCI included).

[2] Gaixia Xu, Suxia Lin, Wing- Cheung Law, Indrajit Roy, Xiaotan Lin, Shujiang Mei, Hanwu Ma, Siping Chen, Hanben Niu, Xiaomei Wang, The Invasion and Reproductive Toxicity of QDs-Transferrin Bioconjugates on Preantral Follicle in vitro, *Theranostics*, 2: 734-745, 2012. (SCI included)

[3] Guimiao Lin, Marie Chia-Mi Lin , Suxia Lin, Hong Yao, Shuihong Yu, Wanxian Yi, Gaixia Xu, Samuel Sai-Ming Ng, Siping Chen, Jing Yu, Xiaomei Wang, Baoxue Yang, Early Growth Response Protein-1 Promoter- Mediated Synergistic Antitumor Effect of hTERTC27 Gene Therapy and 5-Fluorouracil on Nasopharyngeal Carcinoma, *Cancer Biotherapy and Radiopharmaceuticals*, 27: 434-441, 2012. (SCI included)

[4] . Ken-Tye Yong, Gaixia Xu and Indrajit Roy, Engineering arginine cross-linked mercaptoundecanoic acid CdSe / CdS / ZnS quantum dots for two-photon imaging of live cancer cells, *Chem Commun*, 47: 2901-2903, 2011. (SCI & EI included)

[5] Chibao Huang, Junle Qu, Jing Qi , Meng Yan, Gaixia Xu, Dicyanostilbene-derived two-photon fluorescence probe for free zinc ions in live cells and tissues with a large two-photon action cross section, *Organic Letters*, 13 (6): 1462-1465, 2011. (SCI included)

[6] Gaixia Xu, Ken-Tye Yong, Indrajit Roy and Atcha Kopwitthaya, FGF2-labeled semiconductor nanocrystals as luminescent biolabels for imaging neuroblastoma cells, *Journal of Biomedical Nanotechnology*, 6: 641-647 (2010) (SCI included)

[7] Danni Chen, Gaixia Xu, Bahi Ahmed Ali, Ken-Tye Yong, Cuihong Zhou, Xiaomei Wang, Junle Qu, Paras N. Prasad and Hanben Niu, Uptake of transferrin-conjugated quantum dots in single living cells, *Chinese Optics Letters*, 8 (10): 940-943, 2010. (SCI & EI included)

[8] Supriya D. Mahajan, Indrajit Roy, Gaixia Xu, Ken-Tye Yong, Hong Ding, Ravikumar Aalimkari, Jessical L. Reynolds, Donald E. Sykes, Bindukumar B. Nair, Elaine Y. Lin, Paras N. Prasad and Stanley A. Schwartz, Enhancing the Delivery of Anti Retroviral Drug "Zidovudine" Across the Blood Brain Barrier Using Nanoparticles. *Curr. HIV Res.* 8, 396-404, 2010. (SCI included)