

# 个人简历

姓 名	杨长通	学 历	博士研究生
性 别	男	婚姻状况	已婚
出生年月	1967.08	籍 贯	福建南安
民 族	汉族	政治面貌	群众
毕业学校	新加坡国立大学	专 业	化学

## 教育经历

1984.09-1987.07 福建化工学校，化工专业， 中专  
 1994.09-1997.07 厦门大学化学系，化学专业， 硕士  
 1998.07-2002.12 新加坡，新加坡国立大学，化学专业， 博士

## 工作经历

1987.09-1994.07 厦门大学化学系，实验课教学辅助人员  
 1997.07-1998.07 厦门大学化学系，任教老师  
 2002.12-2003.10 新加坡国立大学化学系，研究助理。  
 2003.10-2005.07 美国爱荷华大学，博士后  
 2005.07-2006.07 美国密西根大学，博士后  
 2006.08-2007.09 美国普渡大学 ，博士后  
 2007.09-2014.04 新加坡科技研究局医学生物成像研究中心， Scientist/Senior Scientist  
 2014.04-今 新加坡，南洋理工大学李光前医学院， Senior Research Fellow and Radiochemist

## 以往工作业绩：

### 领导或参与过的项目：

1. 主要参与者，执行人， PET 分子医学影像探针 Ga-68 在帮助诊断糖尿病中的应用， 500 万新加坡元，新加坡政府，南洋理工大学李光前医学院与奥地利维也纳医科大学（2015-2019）。
2. 负责人，Project Principle Investigator, Development of novel Ga-68 labeled polymer nanoparticles for tumor targeting PET radiotracer. Ga-68 标记聚合物纳米材料作为帮助诊断肿瘤的正电子发射断层扫描探针。100 万新加坡元，新加坡科技研究局， 2012-2015。
3. 负责人，Project Principle Investigator, Non-invasive Imaging in Cancer Diagnosis and Cell Therapy with Quantum dot-Sized Conjugated Polymer-Based Biocompatible Dots. 100 万新加坡元，新加坡科技研究局 2013-2015。
4. 负责人，Project Director and Project Principle Investigator, Development of Intravascular Contrast

Agent.血管内核磁共振成像造影剂的研发, 40 万新加坡元, 新加坡科技研究局 (2010-2012)。

5. 主要参与人, Development of new target-specific radiotracers for early diagnosis of cancer, 100 万美元, 2005-2008, NIH, 美国国立卫生研究院。在普渡大学 (Purdue University)。

6. 主要参与人, 项目: New W3, Ta3, Bi9, Gdn(n = 12, 14, 15), and large Y60 clusters as new paradigms for multiplied X-ray contrast and/or magnetic resonance relaxivity in noninvasive biomedical imaging. 200 万美元, 2002-2005, NIH, 美国国立卫生研究院。在爱荷华大学 (The University of Iowa and Hospital) .

#### 代表性论文 (著):

1. **Chang-Tong Yang\***, Krishna Ghosh, Parasuraman Padmanabhan, Christer, Halldin, Balazs Gulyas “PET Probes for Imaging Pancreatic Islet Cells” Clinical and translational imaging, 2017, Accepted. **Invited review**

2. **Chang-Tong Yang\***, Parasuraman Padmanabhan, Balazs Gulyas “Gadolinium(III) Based Nanoparticles for T1-weighted Magnetic Resonance Imaging Probes” RSC Advances, Review Article, 2016, 6, 60945-66. (**IF: 3.1**)

3. Alexander W. Jackson, Prashant Chandrasekharan, Jian Shi, **Chang-Tong Yang\***, Tao He “Synthesis and in vivo MRI Evaluation of Biocompatible Branched Copolymer Nanoparticles Prepared by RAFT Polymerization” International J Nanomedicine, 2015, 10, 5895-5907. (**IF: 4.3**)

4. Prashant Chandrasekharan, **Chang-Tong Yang\***, Fatima Ali Nasrallah, Hui Chien Tay, Kai-Hsiang Chuang, Edward G. Robins, “Pharmacokinetics of Gd(DO3A-Lys) and MR imaging studies in an orthotopic tumor model” Contrast Media & Molecular Imaging, 2015, 237-244. (**IF: 3.3**)

5. Jie Fang, Prashant Chandrasekharan, Xiao-Li Liu, Yong Yang, Yun-Bo Lv, **Chang-Tong Yang\***, Jun Ding,\* “Manipulating the Surface Coating of Ultra-Small Gd2O3 Nanoparticles for Improved T1-weighted MR Imaging” Biomaterials, 2014, 35, 1636-1642. (**IF: 8.4**)

6. **Chang-Tong Yang\***, Prashant Chandrasekharan, Tao He, Zihan Poh, Kai-Hsiang Chuang, Edward G. Robins “Gadolinium Chelate as an Intravascular MRI Contrast Agent for Tumor Angiography” Biomaterials, 2014, 35, 327-336. (**IF: 8.4**)

7. Kai Li, Dan Ding, Chandrasekharan Prashant, Wei Qin, **Chang-Tong Yang**, Ben Zhong Tang, Bin Liu “Gadolinium-Functionalized Aggregation-Induced Emission (AIE) Dots as Dual-Modality Probes for Cancer Metastasis Study” Adv. Healthcare Mater. 2013, 2, 1600-1605. (**IF: 5.76**)

8. Jie Liu, Kai Li, Junlong Geng, Li Zhou, Chandrasekharan Prashant, **Chang-Tong Yang**, Bin Liu, “Single Molecular Hyperbranched Nanoprobe for Fluorescence and Magnetic Resonance Dual Modal Imaging” Polymer Chemistry, 2013, 4, 1517-1524. (**IF: 5.4**)

9. Eugene Shi Guang Choo, Erwin Peng, Reshmi Rajendran, Prashant Chandrasekharan, **Chang-Tong Yang**, Jun Ding, Kai-Hsiang Chuang, and Junmin Xue “Superparamagnetic Nanostructures for Off-Resonance Magnetic Resonance Spectroscopic Imaging”, Advanced Functional Materials. 2013, 23(4), 496-505. (**IF: 12.1**)

10. **Chang-Tong Yang\***, Kai-Hsiang Chuang “Gd(III) chelates for MRI contrast agents: from high relaxivity to “smart”, from blood pool to blood-brain barrier permeable” MedChemComm, 2012,3(5), 552-565. Invited Review. (**IF: 2.6**)

11. Erwin Peng, Eugene Shi Guang Choo, Prashant Chandrasekharan, **Chang-Tong Yang**, Jun Ding, Kai-Hsiang Chuang, Jun Min Xue “Synthesis of Manganese Ferrite/Graphene Oxide Nanocomposites for Biomedical Applications”. Small, 2012, 8, 3620-3630. (**IF: 8.64**)

12. Prashant Chandrasekharan, Cai-Xian Yong, Zihan Poh, Tao He, Zhengjie He, Shuang Liu, Edward G. Robins, Kai-Hsiang Chuang **Chang-Tong Yang\***, “Gadolinium Complex with DO3A Conjugated

- 2-(Diphenylphosphoryl)-ethylidiphenylphosphonium Cation as Potential Tumor-Selective MRI Contrast Agents". *Biomaterials*. 2012, 33, 9225-9231. (IF: 8.4)
13. Happy Tan, Miao Wang, **Chang-Tong Yang**, Shilpa Pant, Kishore K. Bhakoo, Siew Yee Wong, Zhi-Kuan Chen, Xu Li, John Wang "Silica Nanocapsules of Fluorescent Conjugated Polymers and Superparamagnetic Nanocrystals for Dual-Mode Cellular Imaging" *Chem-A Eur J*. 2011, 17, 6696-6706. (IF: 5.3)
14. Krisada Kittigowittana, **Chang-Tong Yang**,\* Kai-Hsiang Chuang, Xavier Golay, and Roderick W. Bates. "Development of Novel Intravascular Contrast Agents for MRI Using Gadolinium Chelate" *ChemMedChem*. 2011, 6, 781-787. (IF: 3.2)
15. Prashant Chandrasekharan, Dipak Maity, **Chang-Tong Yang**, Ding Jun, Kai-Hsiang Chuang, Feng Si-Shen. "Superparamagnetic iron oxide - Loaded poly (lactic acid)-D-a-tocopherol polyethylene glycol 1000 succinate copolymer nanoparticles as MRI contrast agent" *Biomaterials*. 2010, 31, 5588-5597. (IF: 8.4)
16. Dipak Maity, Prashant Chandrasekharan, **Chang-Tong Yang**, Kai-Hsiang Chuang, Feng Si-Shen, Ding Jun. "Facile Synthesis of Water-Stable Fine Magnetite Nanoparticles for MRI and Magnetic Hyperthermia Applications" *Nanomedicine*. 2010, 5(10), 1571-1584. (IF: 4.7)
17. **Chang-Tong Yang**, Young-Seung Kim, Jianjun Wang, Lijun Wang, Zi-Bo Li, Xiaoyuan Chen, Ming Fan, Jian-Jian Li and Shuang Liu,"<sup>64</sup>Cu-Labeled 2-(Diphenylphosphoryl)ethylphenyl-phosphonium Cations as Highly Selective Tumor Imaging Agents: Effects of Linkers and <sup>64</sup>Cu Chelates on Biodistribution Characteristics" *Bioconjugate Chem*. 2008, 19, 2008-2022. (IF: 4.8)
18. Young-Seung Kim, **Chang-Tong Yang**, Jianjun Wang, Lijun Wang, Zi-Bo Li, Xiaoyuan Chen and Shuang Liu, "Effects of Targeting Moiety, Linker, Bifunctional Chelator and Molecular Charge on Biodistribution Characteristics of <sup>64</sup>Cu-Labeled Triphenylphosphonium Cations" *J. Med. Chem*. 2008, 51, 2971-2984. (IF: 6.3)
19. **Chang-Tong Yang**, Subramanya G. Sreerama, Wen-Yuan Hsieh and Shuang Liu, "Synthesis and Characterization of a Novel Macrocyclic Chelator with 3-Hydroxy-4-Pyrone Chelating Arms and Its Complexes with Medicinally Important Metals" *Inorg. Chem*. 2008, 47, 2719-2727. (IF: 4.86)
20. Jianjun Wang, **Chang-Tong Yang**, Young-Seung Kim, Subramanya G. Sreerama, Qizhen Cao, Zi-Bo Li, Zhengjie He, Xiaoyuan Chen and Shuang Liu, "<sup>64</sup>Cu-Labeled Triphenylphosphonium and Triphenyl arsonium Cations as Highly Tumor-Selective Imaging Agents" *J. Med. Chem*. 2007, 50, 5057-5069. (IF: 6.3)
21. **Chang-Tong Yang**, and Shuang Liu, "Synthesis and Structural Characterization of Complexes of a DO3A-Conjugated Triphenylphosphonium Cation with Diagnostically Important Metal Ions" *Inorg. Chem*. 2007, 46, 8988-8997. (IF: 4.86)
22. **Chang-Tong Yang**, Muthalagu Vetrichelvan, Xiandong Yang, Daqing Wu, Keith S. Murray, John D. Ranford and Jagadese J. Vittal "Synthesis, Structural Properties and Catecholase Activities of Copper(II) Complexes with Reduced Schiff Base N-(2-Hydroxybenzyl)-Amino Acids". *Dalton Trans*. 2004, 113-121. (IF: 4.02)
23. Daming Fan, **Chang-Tong Yang**,\* John D. Ranford and Jagadese J. Vittal, "Chemical and Biological Studies of Gold(III) Complexes with Uninegative Bidentate N-N Ligands" *Dalton Trans*. 2003, 4749-4753. (IF: 4.02)
24. Daming Fan, **Chang-Tong Yang**,\* Peng Foo Lee, John D. Ranford and Jagadese J. Vittal, "Synthesis, Characterization, and Biological Activities of 2-Phenylpyridine Gold(III) Complexes with Thiolate Ligands" *Dalton Trans*. 2003, 3376-3381. (IF: 4.02)
25. Daming Fan, **Chang-Tong Yang**,\* Jagadese J. Vittal, John D. Ranford, Peng Foo Lee "Chemical and Biological Studies of Dichloro-(2-Phenylpyridine) Gold(III) Complex and Its Derivatives". *Dalton*

Trans. 2003, 2680-2685. (IF: 4.02)

26. **Chang-Tong Yang**, Boujemaa Moubaraki, Keith S. Murray, and Jagadese J. Vittal "Synthesis, Characterization and Properties of Ternary Copper (II) Complexes Containing Reduced Schiff Base N-(2-Hydroxybenzyl)  $\alpha$ -Amino Acids and 1,10-Phenanthroline". Dalton Trans. 2003, 880-889. (IF: 4.02)

27. **Chang-Tong Yang**, Boujemaa Moubaraki, Keith S. Murray, John D. Ranford, and Jagadese J. Vittal " Interconversion of Monomer and Two Coordination Polymers of a Copper(II)-Reduced Schiff Base Ligand-1,10-Phenanthroline Complex Based on Hydrogen and Coordinative Bonding". Inorg. Chem, 2001, 40, 5934-5941. (IF: 4.86)

#### 论著:

Prashant Chandrasekharan, **Chang-Tong Yang**, "Nanobiomaterials for Molecular Imaging" Chapter 11, in Nanobiomaterials: Classification, Fabrication and Biomedical Applications, (2017) First Edition, Wiley-VCH Verlag GmbH & Co. KGaA.

#### 申请的专利:

Intravascular contrast agents for MRI using Gadolinium chelates. United States. (2009)  
P/05283/01/PCT. By Chang-Tong Yang, Xavier Golay, Roderick W. Bates.

#### 其他:

从 2009 年起, 连续每年至少在本专业大型国际学术会议比如 World Molecular Imaging Congress (世界分子成像大会), European Association of Nuclear Medicine (欧洲核医学协会年会) 作研究报告。