

**姓 名：**燕云峰

**性 别：**男

**工作部门：**生物工程学院

**技术职称：**校聘教授

**最高学位：**博士

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**主要研究方向：**

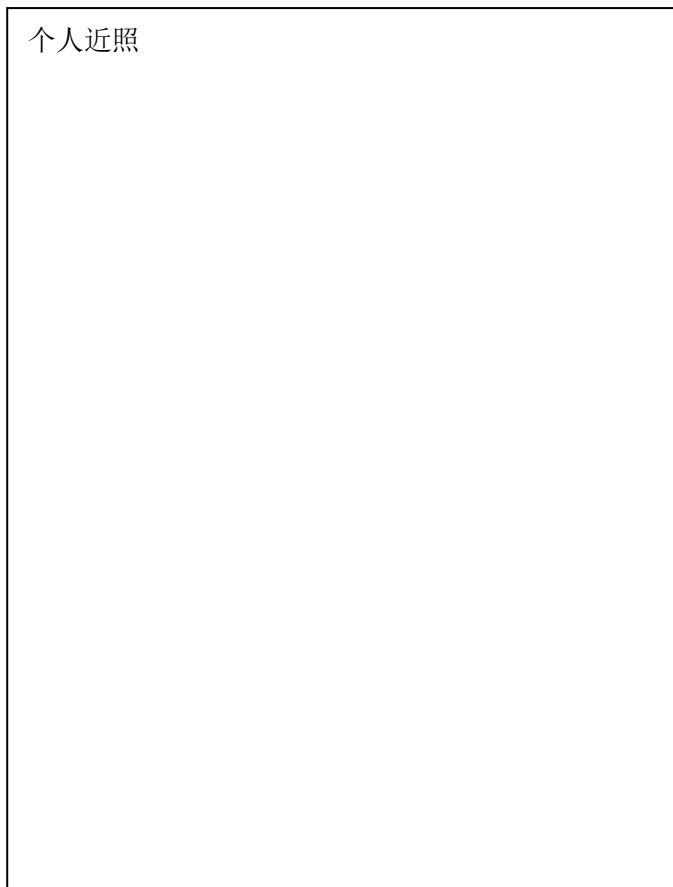
1. 纳米生物学。
2. 新型基因药物载体的构建与评价；基因技术在生物医学中的应用。
3. 蛋白质分离与固定化酶。

**个人简介：**

燕云峰博士 2007 年从中国科学技术大学化学物理系博士毕业，2007-2009 年在复旦大学高分子科学系江明院士课题组做博士后。2011 年 3 月至 2017 年 1 月，先后在美国麻省大学（University of Massachusetts, Amherst）和德克萨斯大学西南医学中心（University of Texas Southwestern Medical Center）做博士后和研究员（Research Scientist）。主要研究领域包括纳米生物医药、生物高分子材料和蛋白质科学。近 5 年来发表 SCI 论文二十多篇，包括在国际顶级期刊 PNAS 和一流期刊 J. Am. Chem. Soc., Adv. Mater. 和 Biomaterials 等杂志发表论文 5 篇，相关研究得到国际同行的高度评价和认可。

在西南医学中心工作期间，燕云峰博士及其研究团队将材料化学与生物医学相结合，成功制备了具有癌症细胞选择性的高分子-RNA 纳米粒子。这种纳米粒子的癌症选择性仅仅

个人近照



依靠高分子纳米粒子自身的物理化学性质，而不需要修饰额外的靶向基团。这一发现为传统的癌症靶向治疗提供了新的思路，具有重要的科学意义和潜在的医学应用价值。该工作在国际顶级期刊 PNAS 发表后，被 Chemical Research in Toxicology、Oncology Times 和 ScienceDaily 作为研究亮点报道和评论。

此外，燕云峰博士长期担任 Polymer Chemistry, Langmuir, Chemical Communications, Journal of Materials Chemistry B, Soft Matter 和 Food Hydrocolloids 等主流杂志审稿人。

### 发表的论文、专著、教材：

1. Meng Li, Yisheng Xu\*, Jinli Sun, Mingwei Wang, Dahai Yang, Xuhong Guo, Haiyun Song, Song Cao\*, and **Yunfeng Yan\*** “Fabrication of Charge-Conversion Nanoparticles for Cancer Imaging by Flash Nanoprecipitation” *ACS Applied Materials & Interfaces* **2018** in press. (一区, IF: 7.5)
2. **Yunfeng Yan\***, Hu Xiong, Xinyi Zhang, Qiang Chen, and Daniel J. Siegwart\* “Systemic mRNA Delivery to the Lungs by Functional Polyester-based Carriers” *Biomacromolecules* **2017**, *18*, 4307-4315. (二区, IF: 5.2)
3. Hu Xiong, Hao Zuo, **Yunfeng Yan**, Gino Occhialini, Kejin Zhou, Yihong Wan, and Daniel J. Siegwart “High-contrast fluorescence detection of metastatic breast cancer including bone and liver micrometastases via size-controlled pH-activatable water-soluble probes” *Advanced Materials* **2017**, *29*, 1700131. (一区, IF: 19.8)
4. **Yunfeng Yan**, Kejin Zhou, Hu Xiong, Jason B. Miller, Edward A. Motea, David A. Boothman, Li Liu, and Daniel J. Siegwart “Aerosol Delivery of Stabilized Polyester-siRNA Nanoparticles to Silence Gene Expression in Orthotopic Lung Tumors” *Biomaterials* **2017**, *118*, 84-93. (一区, IF: 8.4)
5. **Yunfeng Yan**, Li Liu, Hu Xiong, Jason B. Miller, Kejin Zhou, Petra Kos, Kenneth E. Huffman, Sussana Elkassih, John W. Norman, Ryan Carstens, James Kim, John D. Minna, and Daniel J. Siegwart “Functional Polyesters Enable Selective siRNA Delivery to Lung Cancer over Matched Normal Cells” *Proceedings of the National Academy of Sciences of the United States of America* **2016**, *113*, E5702-E5710. (Highlighted by Chemical Research in Toxicology, Oncology Times, and ScienceDaily) (一区, IF: 9.7)
6. Kejin Zhou, Liem H. Nguyen, Jason B Miller, **Yunfeng Yan**, Petra Kos, Lin Li, Jing Hao, Jonathan T Minnig, Hu Xiong, Hao Zhu, and Daniel J Siegwart “Modular Degradable Dendrimers Enable Small RNAs to Extend Survival in an Aggressive Liver Cancer Model” *Proceedings of the National Academy of Sciences of the United States of America* **2016**, *113*, 520-525. (一区, IF: 9.7)
7. Kejin Zhou, Petra Kos, **Yunfeng Yan**, Hu Xiong, Yi-Li Min, Karina A. Kinghorn, Jonathan T. Minnig, Jason B. Miller, and Daniel J. Siegwart “Intercalation-mediated Nucleic Acid Nanoparticles for siRNA Delivery” *Chemical Communications* **2016**, *52*, 12155-12158. (一区, IF: 6.3)
8. Hu Xiong, Petra Kos, **Yunfeng Yan**, Kejin Zhou, Jason B. Miller, Sussana Elkassih, and Daniel J. Siegwart “Activatable Water Soluble Probes Enhance Tumor Imaging by Responding to Dysregulated pH and Exhibiting High Tumor-to-liver Fluorescence Emission Contrast” *Bioconjugate Chemistry* **2016**, *27*, 1737-1744. (二区, IF: 5.2)

4.8)

9. Jing Hao, Petra Kos, Kejin Zhou, Jason B Miller, Lian Xue, **Yunfeng Yan**, Hu Xiong, Sussana Elkassih, Daniel J Siegwart “Rapid Synthesis of a Lipocationic Polyester Library via Ring-opening Polymerization of Functional Valerolactones for Efficacious siRNA Delivery” *Journal of the American Chemical Society* **2015**, *137*, 9206–9209. (一区, IF: 13.9)
10. **Yunfeng Yan**, Lian Xue, Jason B Miller, Kejin Zhou, Petra Kos, Sussana Elkassih, Li Liu, Atsushi Nagai, Hu Xiong, Daniel J Siegwart “One-pot Synthesis of Functional Poly(aminoester sulfide)s and Utility in Delivering pDNA and siRNA” *Polymer*, **2015**, *72*, 271-280. (二区, IF: 3.7)
11. Ebru Kizilay, Daniel Seeman, **Yunfeng Yan**, Xiaosong Du, Paul L. Dubin, Laurence Donato-Capel, Lionel Bovetto and Christophe Schmitt “Structure of Bovine  $\beta$ -Lactoglobulin/Lactoferrin Coacervates” *Soft Matter* **2014**, *10*, 7262-7268. (二区, IF: 3.9)
12. **Yunfeng Yan** and Daniel Siegwart “Scalable Synthesis and Derivation of Functional Polyesters Bearing Ene and Epoxide Side Chains” *Polymer Chemistry* **2014**, *5*, 1362-1371. (二区, IF: 5.4)
13. **Yunfeng Yan**, Ebru Kizilay, Daniel Seeman, Sean Flanagan, Paul L. Dubin, Lionel Bovetto, Laurence Donato and Christophe Schmitt “Heteroprotein Complex Coacervation: Bovine  $\beta$ -Lactoglobulin and Lactoferrin” *Langmuir* **2013**, *29*, 15614-15623. (二区, IF: 3.8)
12. Yisheng Xu, Yoni Engel, **Yunfeng Yan**, Kaimin Chen, Daniel F. Moyano, Paul L. Dubin, Vincent M. Rotello “Enhanced Electrostatic Discrimination of Proteins on Nanoparticle-coated Surfaces” *Journal of Materials Chemistry B* **2013**, *1*, 5230-5234. (一区, IF: 4.5)
13. **Yunfeng Yan**, Daniel Seeman, Bingqian Zheng, Ebru Kizilay, Yisheng Xu, and Paul L. Dubin “pH-Dependent Aggregation and Disaggregation of Native  $\beta$ -Lactoglobulin in Low Salt” *Langmuir* **2013**, *29*, 4584-4593. (二区, IF: 3.8)
14. **Yunfeng Yan**, Hongwei Hou, Tianrui Ren, Yisheng Xu, Quanxi Wang, and Wenping Xu “Utilization of Environmental Waste Cyanobacteria as a Pesticide Carrier: Studies on Controlled release and photostability of Avermectin” *Colloids and Surfaces B* **2013**, *102*, 341-347. (二区, IF: 3.9)

## 目前研究项目：

- 1.
- 2.
- 3.

## 科研成果及专利：

**研究生培养等教学情况：**

**奖励和荣誉**