

[首页 \(/\)](#) [学院简介 \(/content/2\)](#) [师资队伍 \(/content/3\)](#) [本科生培养 \(/content/4\)](#) [研究生培养 \(/content/5\)](#)

[科学研究 \(/content/6\)](#)
[师资队伍 >>](#)

[国际合作 \(/content/7\)](#) [党群工作 \(/content/8\)](#) [学生之家 \(/content/9\)](#) [校友空间 \(/content/10\)](#)
现在位置：[首页 \(/\)](#) >> [简介 >>](#) [袁晓燕](#)

[师资概况 \(/content/24\)](#)

[教师简介 \(/teacher/25\)](#)

[杰出人才 \(/content/29\)](#)

[人才招聘 \(/content/94\)](#)



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教育背景：

1981.9-1985.7, 天津大学应用化学系, 高分子化工专业工学学士

1985.9-1988.3, 天津大学材料系, 高分子材料专业工学硕士

1993.9-1997.3, 天津大学应用化学系, 工学博士(在职)

工作经历：

1988.3-今, 天津大学材料学院, 助教、讲师(1990)、副教授(1998)、教授(2003), 博士生导师

1998.11-2001.4, 香港理工大学赛马会复康科技中心, 副研究员

2015.3-2015.9, 美国Tufts University生物医学工程系, 高级研究学者(国家留学基金委资助)

研究方向

研究领域：

生物医用材料：组织再生生物活性材料、电纺纤维膜、水凝胶、细胞冷冻保护剂

功能高分子材料：疏水防冰涂层, 防结冰材料

聚合物结构与性能：多组分高分子材料、嵌段共聚物结构表征

主要讲授课程：

承担项目

主要承担项目：

- 海藻糖氨基酸共聚物的结构调控及其对红细胞的低温冻存保护作用(51773150), 国家自然科学基金面上项目, 2018.1-2021.12, 负责人
- 氨基酸聚合物修饰的人工血管材料抗菌抗炎研究(17JCZDJC37500), 天津市应用基础及前沿技术研究计划重点项目, 2017.4-2020.3, 负责人
- 多层聚丙烯共聚酯/壳聚糖电纺膜定位负载microRNA的血管再生活性材料(51473118), 国家自然科学基金面上项目, 2015.1-2018.12, 负责人
- 飞行器专用防覆冰涂料的研制(14ZCZDZX00008), 天津市科技计划支撑项目, 2014.4-2016.6, 负责人
- POSS-氟丙烯酸酯-聚硅氧烷共聚物微结构调控及低温防冰性能(51273146), 国家自然科学基金面上项目, 2013.1-2016.12, 负责人
- 骨-软骨界面再生修复的梯度活性支架与细胞响应关系(51073117), 国家自然科学基金面上项目, 2011.1-2013.12, 负责人
- 电纺超细纤维膜构筑血管化组织工程生物活性支架的研究(09JCZDJC18600), 天津市应用基础及前沿技术研究计划重点项目, 2009.4-2012.3, 负责人
- 组织工程复合支架与控制释放生物活性物质的协同作用研究(30828008), 国家自然科学基金海外及港澳学者合作研究项目, 2009.1-2010.12, 主研
- 生物降解核/壳结构超细纤维及其控制释放生长因子的研究(50573055), 国家自然科学基金面上项目, 2006.1-2008.12, 负责人
- 静电纺丝制备聚丙烯交酯/壳聚糖超细纤维杂化膜的研究(50273027), 国家自然科学基金面上项目, 2003.1-2005.12, 负责人
- 其他项目4项, 已结题3项, 在研1项, 负责人

标志性成果

主要学术成就、获奖及荣誉：

已发表SCI及EI收录论文140余篇, 获授权国家发明专利30余项

“多组分复合电纺超细纤维膜的形成与控制基础研究”获得2009年度天津市自然科学三等奖, 第一完成人

发表文章、专利、专著(代表作)：

2017 and later

- Peiqiong Zhou, Fang Zhou, Bo Liu, Yunhui Zhao, Xiaoyan Yuan*. Functional electrospun fibrous scaffolds with dextran-g-poly(L-Lysine)-VAPG/microRNA-145 to specially modulate vascular SMCs. *Journal of Materials Chemistry B*, 2017, accepted, DOI 10.1039/c7tb01755c.
- Chao Tao, Shan Bai, Xiaohui Li,* Chuan Li, Lixia Ren, Yunhui Zhao, Xiaoyan Yuan*. Formation of zwitterionic coatings with an aqueous lubricating layer for antifogging/anti-icing applications. *Progress in Organic Coatings*, 2018, 115: 56-64.
- Chuan Li, Xiaohui Li, Chao Tao, Lixia Ren, Yunhui Zhao, Shan Bai, Xiaoyan Yuan*. Amphiphilic Antifogging/Anti-Icing Coatings Containing POSS-PDMAEMA-b-PSBMA. *ACS Appl. Mater. Interfaces*, 2017, 9(27): 22959-22969.
- Chao Tao, Xiaohui Li, Bo Liu, Kaiqiang Zhang, Yunhui Zhao, Kongying Zhu, Xiaoyan Yuan*. Highly icephobic properties on slippery surfaces formed from polysiloxane and fluorinated POSS. *Progress in Organic Coatings*, 2017, 103: 48-59.
- Suli Hu, Wenhong Hu, Zhenguang Li, Lixia Ren, Yunhui Zhao*, Xiaoyan Yuan*. Poly(amino acid-hydroxyethyl methacrylate)s with chiral lysine and/or leucine side moieties and their antibacterial abilities for biomedical applications. *Materials Science & Engineering C*, 2017, 76: 1112-1120.
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- Fang Zhou, Xiaoling Jia, Yang Yang, Qingmao Yang, Chao Gao, Suli Hu, Yunhui Zhao, Yubo Fan*, Xiaoyan Yuan*. Nanofiber-mediated microRNA-126 delivery to vascular endothelial cells for blood vessel regeneration. *Acta Biomaterialia*, 2016, 43: 303-313.
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- Kaiqiang Zhang, Xiaohui Li, Yunhui Zhao, Kongying Zhu, Yancai Li, Chao Tao, Xiaoyan Yuan*. UV-curable POSS-fluorinated methacrylate diblock copolymers for icephobic coatings. *Progress in Organic Coatings*, 2016, 93: 87-96.
- Yancai Li[†], Chenghao Luo[†], Xiaohui Li, Kaiqiang Zhang, Yunhui Zhao, Kongying Zhu, Xiaoyan Yuan*. Submicron/nano-structured icephobic surfaces made from fluorinated polymethylsiloxane and octavinyl-POSS, *Applied Surface Science*, 2016, 360: 113-120.
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- Xiaohui Li, Kaiqiang Zhang, Yunhui Zhao, Kongying Zhu, Xiaoyan Yuan*. Formation of icephobic film from POSS-containing fluorosiliconemulti-block methacrylate copolymers. *Progress in Organic Coatings*, 2015, 89: 150-159.
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2013

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2011

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2009

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2003 and before

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