



所属学院 材料科学与工程学院

学科领域 材料科学与工程（高分子材料）

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个人简介

1991.7于复旦大学，高分子化学与物理专业毕业，获学士学位；1991.8—2001.8. 江苏仪征化纤股份有限公司研究院，工程师；2001年于华东理工大学，获材料学硕士学位；2007于加拿大 University of New Brunswick, 获博士学位。2001.9—至今. 华东理工大学材料科学与工程学院，教师。

研究方向

高分子材料的合成、改性与加工等方面的研究与产品开发。

- (1) 通过双螺杆挤出机，运用反应挤出技术，使聚烯烃等通用高分子材料实现高性能化与功能化，如抗微生物、抗静电、高熔体强度等。
- (2) 研究通过双螺杆挤出机将苯乙烯等烯烃单体，数分钟内直接本体聚合成超高分子量的聚合物，或嵌段高聚物，转化率高，低能耗，不产生污染的新型聚合方式及其理论。
- (3) 复合材料界面处理和高分子材料表面的超疏水、疏油改性。

研究成果及主要发表文章

1. Yong Guan, Rui Yang, Yongkang Huang, Chenchen Yu, Xiang Li, Dafu Wei, Xiang Xu*. “Multi-walled carbon nanotubes acting as antioxidant for fluorosilicone rubber.” *Polymer Degradation and Stability*, 2018, 156, 161-169.
2. Zongliang Li, Jie Chen, Wei Cao, Dafu Wei*, Anna Zheng, Yong Guan*. “Permanent antimicrobial cotton fabrics obtained by surface treatment with modified guanidine.” *Carbohydrate Polymers*, 2018, 180, 192–199.
3. Dafu Wei, Zongliang Li, Hao Wang, Jie Liu, Huining Xiao*, Anna Zheng, Yong Guan*. “Antimicrobial paper obtained by dip-coating with modified guanidine-based particle aqueous dispersion.” *Cellulose*, 2017, 24 (9): 3901-3910.
4. Anna Zheng, Yan Xue, Dafu Wei, Yong Guan*, Huining Xiao. “Amphiphilic star block copolymers as gene carrier Part I: Synthesis via ATRP using calix[4]resorcinarene-based initiators and characterization.” *Materials Science and Engineering C- Materials for Biological Applications*, 2013, 23 (1): 519-526.
5. Yong Guan, Liying Qian, Huining Xiao*, Anna Zheng. “Preparation of novel antimicrobial-modified starch and its adsorption on cellulose fibers: Part I. Optimization of synthetic conditions and antimicrobial activities.” *Cellulose*, 2008, 15 (4): 609-618.
6. Yong Guan, Liying Qian, Huining Xiao*, Anna Zheng, Beihai He. “Synthesis of a novel antimicrobial-modified starch and its adsorption on cellulose fibers: part II - adsorption behaviors of cationic starch on cellulose fibers.” *Cellulose*, 2008, 15 (4): 619-629.
7. Yong Guan, Yong, Liying Qian, Huining Xiao *. “Novel anti-microbial host-guest complexes based on cationic β -Cyclodextrin polymers and tricosan/butylparaben.” *Macromolecular Rapid Communications*, 2007, 28: 2244-2248.
8. Anna Zheng, Yong Guan, Dafu Wei, Hong Lu. “Preparation method of functional master batch of polyolefin and its application”, US 7,282,538 B2
9. 郑安呐, 管涌, 危大福, 卢红 .“一种功能化聚丙烯专用料及其制备方法和应用 ”, ZL 00 1 25768.4, 发明专利, 2003.6.25 授权
10. 郑安呐, 危大福, 管涌, 胡福增等 .“分子组装抗微生物技术的创建及其应用 ”, 2007 年上海市技术发明一等奖