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职称	教授	学历学位	研究生/博士			
硕导所在专业	环境科学与工程 安全科学与工程 资源与环境					
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研究方向	1. 阻燃、抑燃、防火耐高温材料；2. 生物基及生物可降解材料；3. 吸附分离材料；4. 光催化材料及新能源；					
主要科研项目及代表性成果(包括项目、论文、专著、获奖、专利等):						
<p><b>科研项目:</b></p> <ol style="list-style-type: none"> <li>1. 环境友好高分子材料聚己二酸丁二酯 (PBA) 的应用化制备及其多晶结构-球晶形貌-生物降解性的关系及调控机理, 国家自然科学基金, 主持, 2014.1-2016.12, 结项。</li> <li>2. PBA 聚集态结构对晶体形态、性能的影响及复合材料制备, 天津市自然科学基金, 主持, 2015.4-2018.3, 结项。</li> <li>3. 日本废弃物处理处置技术及我国环保对策与出路, 天津市高校聘请外专特色项目, 主持, 2014.5-2015.12, 结项。</li> <li>4. 纳米复合材料吸附水体重金属离子及机理探析, 农业农村部产地环境污染防控重点实验室重点项目, 主持, 2018.1-2020.12, 在研。</li> <li>5. 阻燃材料的成型加工及微观形貌分析, 横向课题, 主持, 2019.8-2020.6, 在研。</li> <li>6. 新型功能材料对 Cd 污染土壤钝化修复效应与机制研究, 横向课题, 主持, 2018.11-2019.12, 结项。</li> <li>7. 废铅膏直接悬浮电解技术及装备, 国家重点研发计划项目, 项目研究骨干, 2020.1-2022.1, 在研。</li> </ol> <p><b>SCI 论文:</b></p> <ol style="list-style-type: none"> <li>1. Zhou Shanshan, Sun Yongyan, Ma Huimin, Jia Chunfeng, Sun Xiaoyu, Yang Yubin, Liu Juan, <b>Yang Jinjun</b> (通讯作者). Linear diamides derivative-nucleated biodegradable poly(ethylene succinate) polyester: Crystallization kinetics and aggregated structure manipulated by hydrogen bond interaction. Journal of Polymers and the</li> </ol>						

Environment. 2021, In press (DOI: 10.1007/s10924-021-02141-2)

2. Jia Chunfeng, Zhou Shanshan, Xie Zhanghua, Wang Lukai, Yang Yubin, Sun Xiaoyu, Xie Yuhong, **Yang Jinjun** (通讯作者). Crystallization kinetics, aggregated structure and thermal stability of biodegradable poly(ethylene succinate) manipulated by a biocompatible layered metal phosphonate as an efficient nucleator. *Polymer International*. 2021, In press (DOI:10.1002/pi.6192)

3. Wei Ziyu, Zhou Shanshan, Xie Yuhong, Sun Yongyan, Ma Huimin, Xie Zhanghua, Zhu Zhe, **Yang Jinjun** (通讯作者). Dual effects of a diamide derivative as nucleator on crystallization kinetics and aggregated structure of biodegradable poly(ethylene succinate). *Polymer Testing*. 2021, 94, 107022.

4. Zhou Shanshan, Wei Ziyu, Sun Yongyan, Zhu Zhe, Xie Zhanghua, Ma Huimin, Yin Jing, Wang Junsheng, **Yang Jinjun** (通讯作者). Biocompatible linear diamides derivative-nucleated biodegradable poly(ethylene succinate): Tailored crystallization kinetics, aggregated structure and thermal degradation. *Polymer Degradation and Stability*. 2021, 183, 109428 (DOI:10.1016/j.polymdegradstab.2020.109428)

5. Ma Huimin, Wei Ziyu, Zhou Shanshan, Zhu Haibo, Tang Jingjing, Yin Jing, Yue Junjie, **Yang Jinjun** (通讯作者). Supernucleation, crystalline structure and thermal stability of bacterially synthesized poly(3-hydroxybutyrate) polyester tailored by thymine as a biocompatible nucleating agent. *International Journal of Biological Macromolecules*. 2020, 165, 1562-1573.

6. Huang Minghui, Wang Ling, Zhang Kangyi, Yan Miao, Li Yuqin, Zhu Zhen, **Yang Jinjun** (通讯作者). Preparation of three-dimensional flower-like Fe-Bi(OH)<sub>3</sub> nanocomposites and the photocatalytic properties for degradation of Rhodamine B in presence of visible light. *Optik-International Journal for Light and Electron Optics*. 2020, 216, 164876. (10.1016/j.ijleo.2020.164876)

7. Li wei, Cen Qiongying, Li Wenjiang, Zhao Zihan, Yang Wenlong, Li Yuqian, Chen Minfang, Yang Guang, **Yang Jinjun**. A green method for synthesizing novel nanoparticles and their application in flexible conductive patterns. *Journal of Materiomics*. 2020, 6(2): 300-307.

8. Li Lingling, Yang Linxuan, Tang Jingjing, **Yang Jinjun** (通讯作者), Li Wei, Zhou Shanshan, Ma Huimin, Zhu Haibo, Zhu Zhen. Modulated crystallization behavior of bacterial copolyester poly(3-hydroxybutyrate-co-3-hydroxyhexanoate): Effect of a linear multiple amides derivative as a nucleator. *Journal of Macromolecular Science, Part A: Pure and Applied Chemistry*. 2020, 57(6): 439-450.

9. Tang Jingjing, Li Lingling, Wang Xiaomin, **Yang Jinjun** (通讯作者), Liang

Xueqing, Li Yuqin, Ma Huimin, Zhou Shanshan, Wang Junsheng. Tailored crystallization behavior, thermal stability and biodegradability of poly(ethylene adipate): Effects of a bio-compatible diamide nucleating agent. *Polymer Testing*. 2020, 81, 106116.

10. Li Lingling, Tang Jingjing, Li Yuqin, **Yang Jinjun** (通讯作者), Sun Yuebing, Ma Huimin, Zhou Shanshan, Zhang Chunqiu, Wang Xin. Multiple amides derivative-nucleated poly(1,4-butylene adipate) polyester: Tailored temperature-dependent polymorphism, crystal morphology and phase transition. *Polymer*. 2020, 186, 122088. (DOI: 10.1016/j.polymer.2019.122088)

11. Wang Junsheng, Xue Lei, Zhao Bi, Lin Guide, Jin Xing, Liu Dan, Zhu Haibo, **Yang Jinjun** (通讯作者), Shang Ke. Flame retardancy, fire behavior and flame retardant mechanism of intumescent flame retardant EPDM containing ammonium polyphosphate/pentaerythritol and expandable graphite. *Materials*. 2019, 12, 4053-4067.

12. Tang Jingjing, Li Lingling, Wang Xiaomin, **Yang Jinjun** (通讯作者), Yue Junjie, Yin Jing, Qi Zhicheng, Zhu Zhen. Crystallization behavior and physical property of poly( $\epsilon$ -caprolactone) tailored by a biocompatible linear diamide nucleating agent. *Polymer Crystallization*. 2019, 2(5): e10084, In press (DOI:10.1002/pi.5710)

13. Liang Hui, Zhao Yun, **Yang Jinjun**, Li Xiao, Yang Xiaoxian, Sasikumar Yesudass, Zhou Zhiyu, Chen Minfang. Fabrication, crystalline behavior, mechanical property and in-vivo degradation of poly(L-lactide) (PLLA)-magnesium oxide whiskers (MgO) nanocomposites prepared by in-situ polymerization. *Polymers*. 2019, 11: 1123-1138.

14. Kong Rui, Jia Yuqing, **Yang Jinjun** (通讯作者), Wang Xiaomin, Sun Yuebing, Lian Jiangru, Chen Jiarui, Kuang Yunqi, Li Yuqin, Huang Minghui. Polymorphism and properties of biodegradable poly(1,4-butylene adipate) tailored by an aliphatic diamide derivative. *Polymer International*. 2019, 68(3): 351-359.

15. Zhao Yun, Liu Bei, Bi Hongwei, **Yang Jinjun**, Li Wei, Liang Hui, Liang Yue, Jia Zhibin, Shi Shuxin, Chen Minfang. The degradation properties of MgO whiskers/PLLA composite *in vitro*. *International Journal of Molecular Sciences*. 2018, 19: 2740-2745.

16. **Yang Jinjun** (通讯作者), Wang Xiaomin, Liang Rong, Kong Rui, Sun Yuebing, Tang Jingjing, Li Lingling, Xue Lei, Chen Qixian. Polymorphism, thermal stability and enzymatic degradation of poly(1,4-butylene adipate) tailored by a benzene-1,3,5-tricarboxamide-based nucleating agent. *Journal of Materials Science*. 2018, 53(14): 10569-10581.

17. Yang Xi, Chen Qixian, **Yang Jinjun**, Wu Sudong, Liu Jun, Li Zhen, Liu Deqiang, Chen Xiyi, Qiu Yongming. Tumor-targeted accumulation of ligand-installed polymeric

micelles influenced by surface PEGylation crowdedness. *ACS Applied Materials & Interfaces*. 2017, 9(50): 44045-44052.

18. **Yang Jinjun** (通讯作者), Liang Rong, Kong Rui, Chen Yichun, Wang Xiaomin, Yin Jing, Wan Jiping, Wang Xiaoli, Bi Chengliang. Crystal morphology, crystallization behavior, polymorphic crystalline structure and thermal stability of poly(1,4-butylene adipate) modulated by a oxalamide derivative nucleating agent. *Polymer Degradation and Stability*. 2017, 144: 33-42.

19. **Yang Jinjun** (通讯作者), Liang Rong, Chen Yichun, Zhang Chunqiu, Zhang Ruiling, Wang Xiaomin, Kong Rui, Chen Qixian. Using a self-assemblable nucleating agent to tailor crystallization behavior, crystal morphology, polymorphic crystalline structure and biodegradability of poly(1,4-butylene adipate). *Industrial & Engineering Chemistry Research*. 2017, 56: 7910-7919.

20. Chen Xiyi, Gu Haifeng, **Yang Jinjun**, Wu Sudong, Liu Jun, Yang Xi, Chen Qixian. Controlled PEGylation crowdedness for polymeric micelles to pursue ligand-specified privileges as nucleic acid delivery vehicles. *ACS Applied Materials & Interfaces*. 2017, 9(10):8455-8459.

21. **Yang Jinjun**, Cao Xiuxiang, Zhao Yun, Wang Liang, Liu Bei, Jia Junping, Liang Hui, Chen Minfang. Enhanced pH stability, cell viability and reduced degradation rate of poly(L-lactide)-based composite *in vitro*: effect of modified magnesium oxide nanoparticles. *Journal of Biomaterials Science, Polymer Edition*. 2017, 28(5): 488-503.

22. Song Shuxin, Liang Min, Qi Xiaojing, Jin Ye, **Yang Jinjun**, Dong Tungalag. Mechanical and gas barrier properties of poly(L-Lactic Acid) by plasma-enhanced chemical vapor deposition of SiO<sub>x</sub>. *Polymer-Plastics Technology and Engineering*. 2017, 1-9.

23. Hua Lei, Chen Qixian, Yin Jing, Zhang Chunqiu, Wang Xiaoli, Yin Jiandao, Feng Xin, **Yang Jinjun** (通讯作者). Fabrication and physical properties of poly( $\epsilon$ -caprolactone)/modified graphene nanocomposite. *Macromolecular Materials and Engineering*. 2017, 302, 1600328-1600338.

24. Liang Rong, Chen Yichun, Zhang Chunqiu, Yin Jing, Liu Xuelei, Wang Lukai, Kong Rui, Feng Xin, **Yang Jinjun** (通讯作者). Crystallization behavior of biodegradable poly(ethylene adipate) modulated by a benign nucleating agent: Zinc phenylphosphonate. *Chinese Journal of Polymer Science*. 2017, 35(4):558-568.

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27. Zhao Yun, Liu Bei, **Yang Jinjun**, Jia Junping, You Chen, Chen Minfang. Effects of modifying agents on surface modifications of magnesium oxide whiskers. *Applied Surface Science*. 2016, 388, 370-375.
28. Zhuang YueZhu, Gu WenXing, **Yang JinJun**, Chen XiYi, Gao Hui. Supramolecular nanoparticles constructed by balancing the forces between attractive host-guest and repulsive electrostatic interactions in two positively charged polymers. *RSC Advances*. 2015, 5: 96464-96451.
29. Dong Tungalag, Yu Zhenfei, Wu Jiaxin, Zhao Zilong, Yun Xueyan, Wang Yu, Jin Ye, **Yang Jinjun**. Thermal and barrier properties of stretched and annealed polylactide films. *Polymer Science, Series A*. 2015, 57: 738-746.
30. Chen Yichun, Wang Siyu, Chen Qixian, Xi Zhilin, Wang Chenwan, Chen Xiyi, Feng Xin, Liang Rong, **Yang Jinjun** (通讯作者). Modulated crystallization behavior, polymorphic crystalline structure and enzymatic degradation of poly(butylene adipate): Effects of layered metal phosphonate. *European Polymer Journal*. 2015, 72: 222-237.
31. **Yang Jinjun** (通讯作者), Chen Yichun, Qin Songyan, Liu Juan, Bi Chengliang, Liang Rong, Dong Tungalag, Feng Xin. Effects of cyanuric acid on crystallization behavior, polymorphism and phase transition of poly(butylene adipate). *Industrial & Engineering Chemistry Research*. 2015, 54(33): 8048-8055.
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33. Xi Zhilin, Jiang Manman, **Yang Jinjun** (通讯作者), Tu Xian. Experimental study on advantages of foam-sol in coal dust control. *Process Safety and Environmental Protection*. 2014, 92: 637-644.
34. Liang Zhichao, **Yang Jinjun**, Hua Lei, Pan Pengju, Huang Jian, Zhang Jianjun, Abe Hideki, Inoue Yoshio. Polymorphic crystallization of poly(butylene adipate) and its copolymer: Effect of poly(vinyl alcohol). *Journal of Applied polymer Science*. 2014, 131: 39600-39606.
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phase segregation in binary miscible crystalline blend of poly(butylene succinate)/poly(ethylene oxide): Effect of crystallization temperature. *Macromolecular Materials and Engineering*. 2013, 298: 201-209.

36. Shi Cancan, Zhang Shuhong, Li Mengting, Sun Wenxiu, Fan Guisheng, Jin Ye, **Yang Jinjun**, Dong Tungalag. Barrier and mechanical properties of biodegradable poly( $\epsilon$ -caprolactone)/cellophane multilayer film. *Journal of Applied polymer Science*. 2013, 130: 1805–1811.

37. **Yang Jinjun**, Pan Pengju, Hua Lei, Feng Xin, Yue Junjie, Ge Yanhui, Inoue Yoshio. Effects of crystallization temperature of poly(vinylidene fluoride) on crystal modification and phase transition of poly(butylene adipate) in their blends: A novel approach for polymorphic control. *Journal of Physical Chemistry B*. 2012, 116(4): 1265-1272.

38. Pan Pengju, **Yang Jinjun**, Shan Guorong, Bao Yongzhong, Weng Zhixue, Cao Amin, Yazawa Koji, Inoue Yoshio. Temperature-variable FTIR and solid-state  $^{13}\text{C}$  NMR investigations on crystalline structure and molecular dynamics of polymorphic poly(L-lactide) and poly(L-lactide)/poly(D-lactide) stereocomplex. *Macromolecules*. 2012, 45: 189-197.

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41. Liang Zhichao, Pan Pengju, Zhu Bo, **Yang Jinjun**, Inoue, Yoshio. Critical role of the conformation of comonomer units in isomorphic crystallization of poly(hexamethylene adipate-co-butylene adipate) forming poly(hexamethylene adipate) type crystal. *Polymer*. 2011, 52: 5204-5211.

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44. Hua Lei, Kai Weihua, **Yang Jinjun**, Inoue Yoshio. A new poly(L-lactide)-grafted graphite oxide composite: Facile synthesis, electrical properties and crystallization behaviors. *Polymer Degradation and stability*. 2010, 95: 2619-2627.

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### 人才称号:

1. 天津市高校“中青年骨干创新人才培养计划”，2017年；
2. 天津市高校优秀青年教师资助计划，2013年；

### 专著、专利及标准编制:

1. 《食品包装学》(参编，负责编写食品包装材料等章节)，普通高等教育“十二五”规划教材，食品科学与工程系列教材；科学出版社，ISBN: 978-7-03-043801-0

2. 专利名称：一种聚（对苯二甲酸丁二醇-co-己二酸丁二醇）酯（PBAT）基复合材料的制备方法。（**杨进军**，梁榕，陈依纯，孔睿，王晓敏）专利已受理（申请号：201710159232.5）

3. 专利名称：新型含磷/氮阻燃剂的制备及其对聚乳酸的自熄灭、阻燃性能影响，申请中，（**杨进军**，周珊珊）

4. 作为标准总负责人正在编制行业标准：《建筑外墙外保温材料的防火耐久性试验方法》（中国工程建设标准化协会标准），2020年11月13日通过网络视频召开了《建筑外墙外保温材料的防火耐久性试验方法》标准编制启动会暨第一次工作会议。

### 获奖:

1. 基于高分散纳米陶瓷体系的有机/无机复合材料制备及应用，天津市科技进步二等奖，2017年，排名第五；

2. 《资源循环科学与工程》创新应用型人才培养体系的探索与实践，天津市第八届教学成果二等奖，2018年，排名第八；

3. 天津理工大学优秀硕士毕业论文指导教师，2016年/2018年；

4. 天津理工大学优秀本科毕业论文（一等奖）指导教师，2014年/2016年；

5. 天津理工大学优秀本科毕业论文（二等奖）指导教师，2019年；