姓名	王银松	职称	教授	所在部门	药学院	研究方向	纳米医学 光声治疗	
办公室	B 楼 202	办公电话		022-8333 6658	电子邮箱	wangyinsong@tmu.edu.cn		

教育背景

2003 年 9 月 – 2006 年 7 月中国医学科学院&北京协和医学院，生物医学工程专业，博士学位
2000 年 9 月 – 2003 年 7 月中国海洋大学，药物化学专业，硕士学位
1993 年 9 月 – 1997 年 7 月沈阳药科大学，药物分析专业，学士学位

工作经历

2015 年 12 月– 今天津医科大学药学院，教授
2010 年 11 月– 2015 年 10 月津医科大学药学院，副教授
2006 年 8 月– 2010 年 10 月天津医科大学药学院，讲师
1997 年 8 月– 2000 年 7 月青岛海尔药业有限公司，助理工程师

研究成果（本人具有代表性的论著、论文及主持的科研项目）

论文

1. Zhang T[#], Liu H[#], Li L[#], Guo Z, Song J, Yang X, Wan G, Li R*, **Wang Yinsong***. Leukocyte/platelet hybrid membrane-camouflaged dendritic large pore mesoporous silica nanoparticles co-loaded with photo/chemotherapeutic agents for triple negative breast cancer combination treatment. Bioact Mater, 2021, 6: 3865-3878. IF: 14.593
2. Li Z[#], Pan W[#], Shi E[#], Bai L, Liu H, Li C, **Wang Yinsong***, Jiayin Deng*, Wang Y*. A multifunctional nanosystem based on bacterial cell-penetrating photosensitizer for fighting periodontitis via combining photodynamic and antibiotic therapies. ACS Biomater Sci Eng, 2021, 7: 772-786. IF: 4.749
3. Cheng Z[#], Cheng Y[#], Chen Q, Li M, Liu H, Li M, Ning Y, Yu Zh*, **Wang Yinsong***, Hao Wang*. Self-assembly of pentapeptides into morphology-adaptablenanomedicines for enhanced combinatorial chemo-photodynamictherapy. Nano Today, 2020, 33: 100878. IF: 20.722
4. Cheng Y[#], Chen Q[#], Guo Z, Yang X, Wan G*, Chen H, **Wang Yinsong***. An intelligent biomimetic nanoplatform for holistic treatment of metastatic triple-negative breast cancer via photothermal ablation and immune remodeling. ACS Nano, 2020, 14: 15161-15181. IF: 15.881
5. Shi S, Wang Y, Wang B, Chen Q, Wan G, Zhang J, Zhang L, Li C*, **Wang Yinsong***. Homologous-targeting biomimetic nanoparticles for photothermal therapy and Nrf2-siRNA amplified photodynamic therapy against oral tongue squamous cell carcinoma. Chem Eng J, 2020, 388: 124268. IF, 13.273
6. Wan G[#], Cheng Y[#], Song J, Chen Q, Chen B, Liu Y, Ji S, Chen H*, **Wang Yinsong***. Nucleus-targeting near-infrared nanoparticles based on TAT peptideconjugated IR780 for photo-chemotherapy of breast cancer. Chem Eng J, 2020, 380: 122458. IF, 13.273
7. Zhang T[#], Liu H[#], Li Y, Li C*, Wan G, Chen B, Li C, **Wang Yinsong***. A pH-sensitive nanotherapeutic system based on a marine sulfated polysaccharide for the treatment of metastatic breast cancer through combining chemotherapy and COX-2 inhibition. Acta Biomater, 2019, 99: 412-425. IF: 8.947

论文	8. Gao C, Zhang Y, Zhang Y, Li S, Yang X, Chen Y, Fu J, **Wang Yinsong***, Yang X*. cRGD-modified and disulfide bond-crosslinked polymer nanoparticles based on iopamidol as a tumor-targeted CT contrast agent. Polym Chem, 2020, 11: 889. IF: 5.582 9. Zhang S#, Guo N#, Wan G, Zhang T, Li C, Wang Y, **Wang Yinsong***, Liu Y. pH and redox dual-responsive nanoparticles based on disulfide-containing poly (β-amino ester) for combining chemotherapy and COX-2 inhibitor to overcome drug resistance in breast cancer. J Nanobiotechnol, 2019, 17: 109. IF, 5.345 10. Tian Z, Xu L, Chen Q, Feng R, Lu H, Tan H, Kang J, **Wang Yinsong***, Hua Yan*. Treatment of surgical brain injury by immune tolerance induced by peripheral intravenous injection of biotargeting nanoparticles loaded with brain antigens. Front Immunol, 2019, 10: 743. IF, 4.816 11. Chen B, Zhang Y, Ran R, Wang B, Qin F, Zhang T, Wan G, Chen H, **Wang Yinsong***. Reactive oxygen species-responsive nanoparticles based on a thioketal-containing poly (β-amino ester) for combining photothermal/photodynamic therapy and chemotherapy. Polym Chem, 2019, 10: 4746-4757. IF, 4.760 12. Zhou P[#], Qin J[#], Zhou C, Wan G, Liu Y, Zhang M, Yang X, Zhang N*, **Wang Yinsong***. Multifunctional nanoparticles based on a polymeric copper chelator for combination treatment of metastatic breast cancer. Biomaterials, 2019, 195: 86-99. IF, 10.273 13. Wan G[#], Chen B[#], Li L, Wang D, Shi S, Wang Y, Zhang L, **Wang Yinsong***. Nanoscaled red blood cells facilitate breast cancer treatment by combining photothermal/photodynamic therapy and chemotherapy. Biomaterials, 2018, 155: 25-40. IF, 10.273 14. Shi S[#], Zhang L[#], Zhu M, Wan G, Li C, Zhang J, Wang Y*, **Wang Yinsong***. Reactive oxygen species-responsive nanoparticles based on PEGlated prodrug for targeted treatment of oral tongue squamous cell carcinoma by combining photodynamic therapy and chemotherapy. ACS Appl. Mater. Interfaces 2018, 10, 29260-29272. IF, 8.456 15. Liu Y, Qiao L, Zhang S, Wan G, Chen B, Zhou P, Zhang N*, **Wang Yinsong***. Dual pH-responsive multifunctional nanoparticles for targeted treatment of breast cancer by combining immunotherapy and chemotherapy. Acta Biomater, 2018, 66: 310-324. IF, 6.638 16. Zhang S#, Wang Dan, Li Y, Li L, Chen H, Xiong Q, Liu Y*, Wang Yinsong*. pH- and redox-responsive nanoparticles composed of charge-reversible pullulan based shells and disulfide-containing poly(ß-amino ester) cores for co-delivery of a gene and chemotherapeutic agent. Nanotechnology, 2018, 29: 325101. IF, 3.399 17. Liu Y[#], Wan G[#], Guo H, Liu Y, Zhou P, Wang H, Wang D, Zhang S, **Wang Yinsong***, Zhang N*. A multifunctional nanoparticle system combines sonodynamic therapy and chemotherapy to treat hepatocellular carcinoma. Nano Res, 2017; 10(3): 834-855. IF, 7.354 18. Wang Y[#], Wan G[#], Li Z[#], Shi S, Chen B, Li C, Zhang L*, **Wang Yinsong***. PEGylated doxorubicin nanoparticles mediated by HN-1 peptide for targeted treatment of oral squamous cell carcinoma. Int J Pharm, 2017; 525: 21-31. IF, 3.862 19. Liu X[#], Gao C[#], Gu J, Gao W, An T, Fu J, **Wang Yinsong***, Yang X*. Hyaluronic acid stabilized iodine-containing nanoparticles with Au nanoshell coating for X-ray CT imaging and photothermal therapy of tumors. ACS Appl Mater Interfaces, 2016; 8: 27622-27631. IF, 7.504 20. Wang H[#], Wan G[#], Liu Y, Chen B, Zhang N*, **Wang Yinsong***. Dual-responsive nanoparticles based on oxidized pullulan and a disulfide-containing poly(β-amino) ester for efficient delivery of genes and chemotherapeutic agents targeting hepatoma. Polym Chem, 2016; 7, 6340-6353. IF, 5.375

论文	21. Zhang C[#], An T[#], Wang D, Wan G, Zhang M, **Wang Yinsong***. Stepwise pH-responsive nanoparticles containing charge-reversible pullulan-based shells and poly(β-amino ester)/poly(lactic-co-glycolic acid) cores as carriers of anticancer drugs for combination therapy on hepatocellular carcinoma. J Control Release, 2016; 226: 193-204. IF, 7.786 22. An T[#], Zhang C[#], Han X, Wan G, Wang D, Yang Z, Wang Y, Zhang L, **Wang Yinsong***. Hyaluronic acid-coated poly(b-amino) ester nanoparticles as carrier of doxorubicin for overcoming drug resistance in breast cancer cells. RSC Adv, 2016; 6: 38624-38636. IF, 3.108 23. Wan G[#], Liu Y[#], Shi S, Chen B, Wang Y, Wang H, Zhang L, Zhang N*, **Wang Yinsong***. Hematoporphyrin and doxorubicin co-loaded nanomicelles for the reversal of drug resistance in human breast cancer cells by combining sonodynamic therapy and chemotherapy. RSC Adv, 2016; 6, 100361-100372. IF, 3.108 24. Wang Y[#], Liu Y[#], Liu Y, Zhou W, Wang H, Wan G, Sun D, Zhang N*, **Wang Yinsong***. A polymeric prodrug of cisplatin based on pullulan for the targeted therapy against hepatocellular carcinoma. Int J Pharm, 2015; 483: 89-100. IF, 3.994 25. Zhou P, An T, Zhao C, Li Y, Li R, Yang R, **Wang Yinsong***, Gao X*. Lactosylated PLGA nanoparticles containing e-polylysine for the sustained release and liver-targeted delivery of the negatively charged proteins. Int J Pharm, 2015; 478: 633-643. IF, 3.994 26. Ren Y, Wang R, Liu Y, Guo H, Zhou X, Yuan X, Liu C, Tian J, Yin H, Wang Yinsong*, Zhang N*. A hematoporphyrin-based delivery system for drug resistance reversal and tumor ablation. Biomaterials, 2014; 35: 2460-2470. IF, 8.557 27. Liu Y, Wang Y, Zhang C, Liu Y, An T, Sun D, Zhang N*, **Wang Yinsong***. Core-shell nanoparticles based on pullulan and poly(β-amino) ester for hepatoma-targeted codelivery of gene and chemotherapy agent. ACS Appl Mater Interfaces, 2014; 6: 18712-18720. IF, 6.723 28. **Wang Yinsong***, Liu Y, Liu Y, Wu J, Li R, Yang J, Zhang N*. pH-sensitive pullulan-based nanoparticles for intracellular drug delivery. Polym Chem, 2014, 5: 423-432. IF, 5.520 29. Guo H[#], Liu Y[#], Wang Y, Wu J, Yang X, Li R, **Wang Yinsong***, Zhang N*. pH-sensitive pullulan-based nanoparticle carrier for adriamycin to overcome drug-resistance of cancer cells. Carbohydr Polym, 2014; 111: 908-917. IF, 4.074 30. **Wang Yinsong***, Chen H, Liu Y, Zhou P, Wang Y, Li R, Yang X, Zhang N*. pH-sensitive pullulan-based nanoparticle carrier of methotrexate and combretastatin A4 for the combination therapy against hepatocellular carcinoma. Biomaterials, 2013; 34: 7181-7190. IF, 8.312 31. Liu Y, Luo Y, Wu J, **Wang Yinsong***, Yang X, Yang R, Wang B, Zhang N*. Graphene oxide can induce in vitro and in vivo mutagenesis. Sci Rep, 2013; 3: e3469. IF, 5.078 32. Wu J, **Wang Yinsong***, Yang X, Liu Y, Yang J, Yang R, Zhang N*. Graphene oxide used as a carrier for adriamycin can reverse drug resistance in breast cancer cells. Nanotechnology, 2012; 23: 355101. IF, 3.842 36. **Wang Yinsong***, Yang X, Yang J, Wu J, Liu Y, Zhang N*. Self-assembled nanoparticles of methotrexate conjugated O-carboxymethyl chitosan: Preparation, characterization and drug release behavior in vitro. Carbohydr Polym, 2011; 86: 1665–1670. IF, 3.628 37. **Yinsong Wang***, Tu S, Li R, Yang X, Liu L, Zhang Q. Cholesterol succinyl chitosan anchored liposomes: preparation, characterization, physical stability, and drug release behavior. Nanomedicine NBM, 2010; 6: 471–477. IF, 4.882

论文	38. Jiang Q, **Yinsong Wang***, Weng J, Liu L, Zhou Z, Zhang Q*, Chen H, Yang W. Self-assembled nanostructures of a cholesterol-saccharide conjugate which acts as an amphiphilic gelator of organic solvents. Cur Nanosci, 2009; 5: 245–251. IF, 1.472 39. **Wang Yinsong***, Jiang Q, Li R, Liu L, Zhang Q*, Wang Y, Zhao J. Self-assembled nanoparticles of cholesterol-modified O-carboxymethyl chitosan as a novel carrier for paclitaxel. Nanotechnology, 2008; 19: 145101. IF, 3.446 40. **Wang Yinsong***, Wang Y, Li R, Zhao J, Zhang Q. Chitosan-based self-assembled nanomicelles as a novel carrier for paclitaxel. Chem J Chinese Universities 2008; 29(5): 1065–1069. IF, 0.592 41. **Wang Yinsong**, Liu L, Jiang Q, Zhang Q*. Self-aggregated nanoparticles of cholesterol-modified chitosan conjugate as a novel carrier of epirubicin. Eur Polym J, 2007; 43: 43–51. IF, 2.248 42. **Wang Yinsong**, Liu L, Weng J, Zhang Q*. Preparation and characterization of self-aggregated nanoparticles of cholesterol-modiWed O-carboxymethyl chitosan conjugates. Carbohydr Polym, 2007; 69: 597–606. IF, 1.782 43. **Yinsong Wang**, Jiang Q, Liu L, Zhang Q. The interaction between bovine serum albumin and the self-aggregated nanoparticles of cholesterol-modified O-carboxymethyl chitosan. Polymer, 2007; 48: 4135–4142. IF, 3.065 44. **Wang Yinsong***, Han YL, Li Y, Wang Y, Li R. Preparation and in vitro experimental study of methotrexate-lactosyl-chitosan conjugate. Chem J Chinese Universities, 2007; 28(6): 1092–1097. IF, 0.695
科研项目	1. 天津大学-四川创新研究院：光（声）动力疗口腔健康管理产品（2020.09–2022.09），200 万元，在研，首席科学家。 2. 国家自然科学基金面上项目（81972903）：基于肿瘤氧供与高渗透策略构建多功能红细胞及其联合光热/光动力与免疫疗法治疗三阴性乳腺癌（2020.01–2023.12），60 万，在研，主持人。 3. 天津医科大学重大项目：天津医科大学基础医学卓越人才（2020.01–2025.12），30 万，在研，主持人。 4. 企业合作开发项目：不同处方组成的牙膏抑制口腔疾病性能考察（2021.07–2023.07），23 万，在研，主持人。 5. 企业合作开发项目：五味子抗氧化活性成分与美容胜肽偶联产品（2021.11–2023.11），20 万，在研，主持人。 6. 天津市自然科学基金重点项目（18JCZDJC33400），白细胞/血小板混合膜介导的仿生纳米载药体系联合光热/光动力与免疫疗法靶向治疗三阴性乳腺癌的研究（2018.04–2021.04），20 万元，已结题，主持人。 7. 天津市高校中青年骨干创新人才（2017.09–2020.08），45 万元，已结题，主持人。 8. 天津医科大学卓越人才基金（2016.01–2019.12）120 万元，已结题，主持人。 9. 国家自然科学基金面上项目（81573005）：联合声动力、化疗与免疫疗法的多功能纳米治疗体系的构建及其靶向抗肝癌作用研究（2016.01–2019.12），68 万，已结题，主持人。 10. 国家自然科学基金面上项目（81371671）：双重响应的基因/化疗药物共载时序释放纳米递送体系靶向抗肝癌研究（2014.01–2017.12），70 万，已结题，主持人。 11. “973”计划项目（No. 2011CB933100）：基于纳米技术的肝癌早期诊断的研究（2011.01–2015.12），2500 万元，已结题，学术骨干。

科研项目	12. 国家自然科学基金青年基金项目（30900303）：一种用于肿瘤联合治疗的 pH 敏感纳米药物输送体系的研究（2010.01–2012.12），21 万，已结题，主持人。 13. 博士后基金特别资助（No. 201104308）：细胞核靶向的 pH 敏感普鲁兰多糖纳米载体逆转肿瘤多药耐药的研究（2011.10–2013.10），10 万，已结题，主持人。 14. 博士后基金面上项目（No. 20100480654）：基于逆转肿瘤多药耐药的 pH 敏感普鲁兰多糖纳米载药体系的研究（2010.12–2012.12），3 万，已结题，主持人。

荣誉奖励

1. 天津市高校中青年骨干创新人才
2. 天津医科大学“十四五”基础医学卓越人才
3. 天津医科大学“十三五”基础医学卓越人才
4. 天津医科大学“十一五”新世纪优秀人才
5. 天津市 2013 年度自然科学奖二等奖

其他事项

1. 中国抗癌协会纳米肿瘤学专业委员会委员
2. 中国生物材料学会纳米生物材料分会委员
3. 中国生物医学工程学会纳米医学与工程分会委员
4. 国家自然科学基金委及北京自然科学基金委函评专家
5. Cancer Biology & Medicine 期刊编委
6. Adv Func Mater, ASC Nano, Biomaterials, ACS Appl Mater Interfaces, J Control Release, Theranostics, Acta Biomater, Carbohydr Polym 等国际期刊评审专家