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教学科目：基础药理学、药理学与毒理学、毒理学与安全用药、中药药理学、高等药剂学、中药研究进展、中西医结合研究进展、基因工程学、生物化学与分子生物学

研究方向：肿瘤药理及靶向药物输送、生物材料与纳米医学、蛋白降解调控药物研究、血管活性药物筛选

竺晓鸣博士 2003 年毕业于浙江大学药学院，获药学学士学位。2008 年毕业于北京协和医学院药物研究，获得药理学博士学位。博士期间研究方向为高通量药物筛选以及血管活性天然药物的发现。2009 年至 2010 年在新加坡南洋理工大学化学与生物医学工程系进行博士后研究工作，期间建立了一种基于荧光共振能量转移技术的生物感测器用于肿瘤血管生成抑制药物的筛选研究。2010 年至 2013 年在香港中文大学威尔斯亲王医院从事博士后研究工作，研究方向是纳米材料的生物医学应用包括药物输送、细胞成像、肿瘤诊断与治疗。2014 年 1 月加入澳门科技大学中药机制与质量全国重点实验室。已经发表 60 余篇 SCI 收录论文，并获得 2017 年中国药理学学会施维雅青年药理学家奖。

学历

2003 – 2008 北京协和医学院药理学博士学位

1999 - 2003 浙江大学药学学士学位

工作经历

2020.7 – 现在 澳门科技大学中药机制与质量全国重点实验室副教授
2014.1 – 2020.6 澳门科技大学中药机制与质量全国重点实验室助理教授
2010.7 – 2013.12 香港中文大学威尔斯亲王医院博士后
2009.5 – 2010.7 新加坡南洋理工大学化学与生物医学工程系博士后

学术成果

近年发表的主要 SCI 期刊论文: (* Corresponding author)

1. Yin D, Wu X, Chen JL, An K, Fang YN, Xiong HM, Wang L, Huang C, Zhu GY, Cheng L, Wang JF*, **Zhu XM***. Spatiotemporal activation of unfolded protein response by combined sonodynamic therapy and proteasome inhibition with bortezomib-conjugated TiN nanoparticles. *Bioactive Materials*, 2026, 61, 774-795.
2. Wang MY, Deng XN, Dong H, Feng XY, Zhu FR, Yin D, Hong C, Chen ZY, Wang L, **Zhu XM***. Enhancing the efficacy of sonodynamic therapy through modulation of autophagy. *Ultrasonics Sonochemistry*, 2025, 121, 107527.
3. Yin D, Wu X, Chen X, Chen JL, Xia X, Wang J, Chen X, **Zhu XM***. Enhanced anticancer effect of carfilzomib by codelivery of calcium peroxide nanoparticles targeting endoplasmic reticulum stress. *Materials Today Bio*, 2025, 32, 101649.
4. Gu ZY, Chen GH, Gao N, Zhang XR, Xu QG, Xiong W, Liu L, Liu Q, Yin D, **Zhu XM***, Huang YZ*. In-situ trichosanthin-IL2/pectin dynamic hydrogel activates dendritic cells and reverses T cell exhaustion for post-operative cancer therapy. *Chemical Engineering Journal*, 2025, 505, 159426.
5. Xu YN, Bai X, Chen JL, Wu X, Yin D, Yuan G, Dai R, **Zhu XM***, Wang JF*. Tracing sentinel lymph nodes and inhibiting lymphatic metastasis with TiN nanobipyramids through photothermal therapy. *International Journal of Nanomedicine*, 2024, 19: 13579-13592.
6. Chen JL, Jia XH, Wu X, Yuan MH, Xia XY, Yin D, Chen X, Gu ZY, Liu JZ, Bai LP, Luo KQ, Wang JF, **Zhu XM***. Kidney-targeted antioxidant salvianolic acid B nanoparticles restoring lysosome homeostasis for acute kidney injury therapy. *Chemical Engineering Journal*, 2024, 490, 151811.
7. Chen X, Wu X, **Zhu XM***. Development of proteasome inhibitors for cancer therapy. *International Journal of Drug Discovery and Pharmacology*, 2024, 3(1): 100004.
8. Chen JL, Jia XH, Xia XY, Wu X, Xu YN, Yuan G, Gu ZY, Luo KQ, Yuan MH, Jiang RB, Wang JF, **Zhu XM***. Co-delivery of vorinostat and chloroquine by autophagy-inhibitory hollow ZrO₂ nanoshells for synergistic combination chemotherapy. *Chemical*

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9. Chen JL, Wu X, Yin D, Jia XH, Chen X, Gu ZY, Zhu XM*. Autophagy inhibitors for cancer therapy: small molecules and nanomedicines. *Pharmacology & Therapeutics*, 2023, 249, 108485.
10. Yuan G, Xu YN, Bai XP, Wang WM, Wu X, Chen JL, Li J, Jia XH, Gu ZY, Zhang X, Hu W, Wang JF, Liu Y*, Zhu XM*. Epirubicin-loaded polyacrylic acid/calcium phosphate nanoparticles for chemoembolization treating hepatocellular carcinoma. *ACS Applied Materials & Interfaces*, 2023, 15(9): 11431-11443.
11. Wu X, Wang L, Xu YN, Chen JL, *et al*, Zhu XM*, Jiang RB*. Chemo-phototherapy with carfilzomib-encapsulated TiN nanoshells suppressing tumor growth and lymphatic metastasis. *Small*, 2022, 18(29): 2200522.
12. Yan GY, Li J, Chen SS, Liu Y, Wu JL, Zhu XM*, Li N*. New limonoids from the fruits of *Melia toosendan* and their autophagic activities. *Phytochemistry Letters*, 2020, 35: 15-22.
13. Chen JL, Zhang H, Huang XQ, Wan HY, Li J, Fan XX, Luo KQ, Wang JH, Zhu XM*, Wang JF*. Antiangiogenesis-combined photothermal therapy in the second near-infrared window at laser powers below the skin tolerance threshold. *Nano-Micro Letters*, 2019, 11(1):93.
14. Zhang H, Chen JL, Li NN, Jiang RB, Zhu XM*, Wang JF*. Au nanobottles with synthetically tunable overall and opening sizes for chemo-photothermal combined therapy. *ACS Applied Materials & Interfaces*, 2019, 11(5): 5353-5363.
15. Wan HY, Chen JL, Zhu XZ, Liu L, Wang JF*, Zhu XM*. Titania-coated gold nano-bipyramids for blocking autophagy flux and sensitizing cancer cells to proteasome inhibitor-induced death. *Advanced Science*, 2018, 5: 1700585.
16. Fang CH*, Ding Q, Bi T, Xu XX, Chen JL, Zhu XM*, Geng BY*. Plasmonic band tunable (Au nanocrystal)/SnO₂ core/shell hybrids for photothermal therapy. *Particle & Particle Systems Characterization*, 2018, 1800238.
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18. Zhu XM*, Wan HY, Jia H, Liu L, Wang JF*. Porous Pt nanoparticles with high near-infrared photothermal conversion efficiencies for photothermal therapy. *Advanced Healthcare Materials*, 2016, 5:3165-3172.
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20. Wang YX*, **Zhu XM**, Liang Q, Cheng CH, Wang W*, Leung KC*. In vivo chemoembolization and magnetic resonance imaging of liver tumors by using iron oxide nanoshell/doxorubicin/poly(vinyl alcohol) hybrid composites. *Angewandte Chemie International Edition*, 2014, 53(19): 4812-5.
21. Wang DW, **Zhu XM (Co-first)**, Lee SF, *et al.* Folate-conjugated Fe₃O₄@SiO₂@gold nanorods@mesoporous SiO₂ nanocomposite: a theranostic agent for magnetic resonance imaging and photothermal therapy. *Journal of Materials Chemistry B*, 2013, 1: 2934-42.
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24. **Zhu XM**, Fu AF, Luo KQ*. A high-throughput fluorescence resonance energy transfer (FRET)-based endothelial cell apoptosis assay and its application for screening vascular disrupting agents. *Biochemical and Biophysical Research Communications*, 2012, 418(4): 641-646.
25. **Zhu XM**, Fang LH, Li YJ, Du GH*. Endothelium-dependent and -independent relaxation induced by pinocembrin in rat aortic rings. *Vascular Pharmacology*, 2007, 46(3): 160-5.