

2025 年度宁夏回族自治区科学技术奖 公示内容（自然科学奖）

一、自然科学奖公示内容

1.项目名称：“抗菌-促成骨”仿生 GTR 膜的构建：基于奥硝唑/bFGF 双缓释系统促进牙周再生研究；

2.主要完成人：张华林、刘劲松、张文、王凯戎、马海绒、张睿；

3.主要完成单位：宁夏医科大学、温州医科大学附属口腔医院、河西学院、太原恒伦悦伦口腔医院有限公司、宁夏医科大学总医院；

4.代表性论文（专著）目录：

[1] Construction of an ornidazole/bFGF-loaded electrospun composite membrane with a core-shell structure for guided tissue regeneration/Materials & Design/Wen Zhang, Qianqian Wang, Kairong Wang, Hairong Ma, Yuwei Gong, Lihua Xu, Hualin Zhang, 2022; 221: 110960;

[2] Co-electrospinning polycaprolactone/gelatin membrane as a tunable drug delivery system for bone tissue regeneration/Materials & Design/Mohammed A. Al-Baadani, Kendrick Hii Ru Yie, Abdullrahman M. Al-Bishari, Bilal A. Alshobi, Zixin Zhou, Kai Fang, Binwei Dai, Yiding Shen, Jianfeng Ma, Jinsong Liu, Xinkun Shen, 2021; 209: 109962;

[3] Preparation of co-electrospinning membrane loaded with simvastatin and substance P to accelerate bone regeneration by promoting cell homing, angiogenesis and osteogenesis/Materials Today Bio/Mohammed A. Al-Baadani, Lihua Xu, Kexin Cai, Kendrick Hii Ru

Yie, Yiding Shen, Abdulrahman M. Al-Bishari, Bilal A. Al-Shaaobi, Pingping Ma, Xinkun Shen, Jinsong Liu, 2023; 21: 100692;

[4] Bone-targeting PLGA derived lipid drug delivery system ameliorates bone loss in osteoporotic ovariectomized rats/Materials & Design/Youyun Zeng, Yiding Shen, Shuyi Wu, Lei Cai, Zhen Wang, Kexin Cai, Jiating Shen, Kendrick Hii Ru Yie, Hualin Zhang, Lihua Xu, Jinsong Liu, 2022; 221: 110967;

[5] JK-2 loaded electrospun membrane for promoting bone regeneration/Materials Science & Engineering C/Abdulrahman M. Al-Bishari, Kendrick Hii Ru Yie, Mohammed A. Al-Baadani, Bilal A. Al-Shaaobi, Zixin Zhou, Kai Fang, Anba Sun, Yiding Shen, Lei Cai, Lili Yao, Xi Ding, Xinkun Shen, Jinsong Liu, 2021; 130: 112471;

[6] Nanoporous tantalum coated zirconia implant improves osseointegration/Ceramics International/Lianjun Wu, Yiwen Dong, Litao Yao, Chuantong Liu, Abdulrahman M Al-Bishari, Kendrick Hii Ru Yie, Hualin Zhang, Jinsong Liu, Gang Wu, 2020; 46: 17437-17448;

[7] Antimicrobial and pro-osteogenic coaxially electrospun magnesium oxide nanoparticles-polycaprolactone/parathyroid hormone-polycaprolactone composite barrier membrane for guided bone regeneration/International Journal of Nanomedicine/Yiwen Dong, Litao Yao, Lei Cai, Mi Jin, Tymour Forouzanfar, Lianjun Wu, Jinsong Liu, Gang Wu, 2023; 18: 369-383;

[8] Study on the local anti-osteoporosis effect of polaprezinc-loaded antioxidant electrospun membrane/International Journal of Nanomedicine/Xue Gao, Mohammed A Al-Baadani, Minjie Wu,

Ningyang Tong, Xinkun Shen, Xi Ding, Jinsong Liu, 2022; 17: 17-29;

[9] Controlled release of bFGF loaded into electrospun core-shell fibrous membranes for use in guided tissue regeneration/Biomedical Materials/Hualin Zhang, Kairong Wang, Tong Gao, Rui Zhang, Zhuoyan Cai, Jinsong Liu, Hairong Ma, Wen Zhang, 2020; 15: 035021;

[10] Construction and characterization of antibacterial PLGA/wool keratin/ornidazole composite membranes for periodontal guided tissue regeneration/Journal of Biomaterials Applications/Hualin Zhang, Hairong Ma, Rui Zhang, Kairong Wang, Jinsong Liu, 2020; 34: 1267-1281.