

姓 名： 金维华

性 别： 男

工作部门： 生物工程学院

技术职称： 副教授

最高学位： 博士

民 族： 汉族

籍 贯： 浙江杭州

联系方式： 18768162473

Email： jinweihua@zjut.edu.cn

电 话： 0571-88320658



主要研究方向：

1. 海洋生物资源高值化利用；2. 活性多糖和寡糖及其衍生物的研究与开发；3. 新型药物对重大疾病（肿瘤，糖尿病和神经推理性疾病等）的机制研究；4. 多糖及其复合物的提取分离和结构分析。

目前研究项目：

目前作为项目负责人主持 1 项国家自然科学基金（青年），1 项省自然科学基金（青年）和 1 项市应用基础研究计划（青年）。此外，作为主要参加者参与和完成国家海洋公益性专项，国家自然科学基金（面上和青年），山东省科技发展计划，北京市科技项目，南通市科技项目，中国科学院知识创新工程重要方向项目，吉林省与中国科学院科技合作高技术产业化项目以及企业委托技术开发项目等。

国家基金：

褐藻硫酸化甘露葡萄糖醛酸寡糖的构效关系与抗帕金森病机制研究，（41506165），21 万元，2016 年 1 月-2018 年 12 月。等

发表的论文：

- [1] **W.H. Jin**, W. Zhang, G. Liu, J. Yao, T. Shan, C. Sun, Q. Zhang, The structure-activity relationship between polysaccharides from *Sargassum thunbergii* and anti-tumor activity, *Int J Biol Macromol*, (2017)
- [2] **W.H. Jin**, G. Liu, W. Zhong, C. Sun, Q. Zhang, Polysaccharides from *Sargassum thunbergii*: Monthly variations and anti-complement and anti-tumour activities, *Int J Biol Macromol*, (2017)
- [3] Y.Y. Zhu, N. Ma, **W.H. Jin**, S.M. Wu, C.M. Sun, Genomic and Transcriptomic Insights into Calcium Carbonate Biomineralization by Marine Actinobacterium *Brevibacterium linens* BS258, *Frontiers in Microbiology*, 8 (2017)

- [4] W.J. Zhang, D.L. Sun, X. Zhao, **W.H. Jin**, J. Wang, Q.B. Zhang, Microanalysis and preliminary pharmacokinetic studies of a sulfated polysaccharide from *Laminaria japonica*, *Chinese Journal of Oceanology and Limnology*, 34 (2016) 177-185.
- [5] P.Y. Zhang, Z.R. Shao, **W.H. Jin**, D.L. Duan, Comparative characterization of two GDP-mannose dehydrogenase genes from *Saccharina japonica* (Laminariales, Phaeophyceae), *Bmc Plant Biology*, 16 (2016)
- [6] S.M. Wu, G. Liu, **W.H. Jin**, P.Y. Xiu, C.M. Sun, Antibiofilm and Anti-Infection of a Marine Bacterial Exopolysaccharide Against *Pseudomonas aeruginosa*, *Frontiers in Microbiology*, 7 (2016)
- [7] J. Wang, H.D. Liu, **W.H. Jin**, H. Zhang, Q.B. Zhang, Structure-activity relationship of sulfated hetero/galactofucan polysaccharides on dopaminergic neuron, *International Journal of Biological Macromolecules*, 82 (2016) 878-883.
- [8] G. Liu, S.M. Wu, **W.H. Jin**, C.M. Sun, Amy63, a novel type of marine bacterial multifunctional enzyme possessing amylase, agarase and carrageenase activities, *Scientific Reports*, 6 (2016)
- [9] G. Liu, S. Kuang, S.M. Wu, **W.H. Jin** (共同通讯), C.M. Sun, A novel polysaccharide from *Sargassum integerrimum* induces apoptosis in A549 cells and prevents angiogenesis in vitro and in vivo, *Scientific Reports*, 6 (2016)
- [10] **W.H. Jin**, W.J. Zhang, H.Z. Liang, Q.B. Zhang, The Structure-Activity Relationship between Marine Algae Polysaccharides and Anti-Complement Activity, *Marine Drugs*, 14 (2016)
- [11] W.J. Zhang, **W.H. Jin**, D.L. Sun, L.Y. Zhao, J. Wang, D.L. Duan, Q.B. Zhang, Structural Analysis and Anti-Complement Activity of Polysaccharides from *Kjellmaniella crassaifolia*, *Marine Drugs*, 13 (2015) 1360-1374.
- [12] Y. Hou, J. Wang, T. Simerly, **W.H. Jin**, H. Zhang, Q.B. Zhang, Hydrogen peroxide released from *Pyropia yezoensis* induced by oligo-porphyrans: Mechanisms and effect, *Journal of Applied Phycology*, 27 (2015) 1639-1649.
- [13] S. Gao, L. Huan, X.P. Lu, **W.H. Jin**, X.L. Wang, M.J. Wu, G.C. Wang, Photosynthetic responses of the low intertidal macroalga *Sargassum fusiforme* (Sargassaceae) to saline stress, *Photosynthetica*, 54 (2015) 430-437.
- [14] **W.H. Jin**, W.J. Zhang, J. Wang, J.T. Yao, E.Y. Xie, D.C. Liu, D.L. Duan, Q.B. Zhang, A study of neuroprotective and antioxidant activities of heteropolysaccharides from six *Sargassum* species, *International Journal of Biological Macromolecules*, 67 (2014) 336-342.
- [15] **W.H. Jin**, W.J. Zhang, J. Wang, S.M. Ren, N. Song, D.L. Duan, Q.B. Zhang, Characterization of laminaran and a highly sulfated polysaccharide from *Sargassum fusiforme*, *Carbohydrate Research*, 385 (2014) 58-64.
- [16] W.J. Zhang, J. Wang, **W.H. Jin**, Q.B. Zhang, The antioxidant activities and neuroprotective effect of polysaccharides from the starfish *Asterias rollestoni*, *Carbohydrate Polymers*, 95 (2013) 9-15.
- [17] J. Wang, **W.H. Jin**, W.J. Zhang, Y. Hou, H. Zhang, Q.B. Zhang, Hypoglycemic property of acidic polysaccharide extracted from *Saccharina japonica* and its potential mechanism, *Carbohydrate Polymers*, 95 (2013) 143-147.
- [18] J. Wang, **W.H. Jin**, Y. Hou, X.Z. Niu, H. Zhang, Q.B. Zhang, Chemical composition and moisture-absorption/retention ability of polysaccharides extracted from five algae, *International Journal of Biological Macromolecules*, 57 (2013) 26-29.
- [19] **W.H. Jin**, W.J. Zhang, J. Wang, Q.B. Zhang, The neuroprotective activities and antioxidant activities of the polysaccharides from *Saccharina japonica*, *International Journal of Biological Macromolecules*, 58 (2013) 240-244.

- [20] **W.H. Jin**, W.J. Zhang, J. Wang, S.M. Ren, N. Song, Q.B. Zhang, Structural analysis of heteropolysaccharide from *Saccharina japonica* and its derived oligosaccharides, *International Journal of Biological Macromolecules*, 62 (2013) 697-704.
- [21] **W.H. Jin**, Q.B. Zhang, J. Wang, W.J. Zhang, A comparative study of the anticoagulant activities of eleven fucoidans, *Carbohydrate Polymers*, 91 (2013) 1-6.
- [22] **W.H. Jin**, J. Wang, H. Jiang, N. Song, W.J. Zhang, Q.B. Zhang, The neuroprotective activities of heteropolysaccharides extracted from *Saccharina japonica*, *Carbohydrate Polymers*, 97 (2013) 116-120.
- [23] **W.H. Jin**, Z.M. Guo, J. Wang, W.J. Zhang, Q.B. Zhang, Structural analysis of sulfated fucan from *Saccharina japonica* by electrospray ionization tandem mass spectrometry, *Carbohydrate Research*, 369 (2013) 63-67.
- [24] **W.H. Jin**, J. Wang, S.M. Ren, N. Song, Q.B. Zhang, Structural Analysis of a Heteropolysaccharide from *Saccharina japonica* by Electrospray Mass Spectrometry in Tandem with Collision-Induced Dissociation Tandem Mass Spectrometry (ESI-CID-MS/MS), *Marine Drugs*, 10 (2012) 2138-2152.
- [25] Y. Hou, J. Wang, **W.H. Jin**, H. Zhang, Q.B. Zhang, Degradation of *Laminaria japonica* fucoidan by hydrogen peroxide and antioxidant activities of the degradation products of different molecular weights, *Carbohydrate Polymers*, 87 (2012) 153-159. 等

科研成果及专利：

- 1, 张全斌, **金维华**, 张文静, 王晶; 甘露葡萄糖醛酸寡糖在制备治疗或预防帕金森病和/或老年痴呆药物和/或在保健品中的应用, **授权公告号: CN103800348B**。
- 2, 张全斌, **金维华**, 王晶, 牛锡珍, 张虹; 褐藻来源的富含葡萄糖醛酸的低硫酸化杂聚糖在制备治疗帕金森病药物和保健品中的应用, **授权公告号: CN103539863B**。
- 3, 张全斌, **金维华**, 符大勇, 王晶, 张虹, 牛锡珍; 甲基化岩藻寡糖和甲基化硫酸酯化岩藻寡糖及其制备方法和应用, **授权公告号: CN103374079B**。
- 4, 张全斌, **金维华**, 王晶; 甘露葡萄糖醛酸寡糖及其衍生物在制备治疗和/或预防肾病药物或保健品中的应用, 专利申请号: 201510648272.7。
- 5, **金维华**, 刘格, 孙超岷, 张全斌; 一种全缘马尾藻多糖的应用, 专利申请号: 201610061227.6 。
- 6, **金维华**, 张全斌, 张文静; 一种马尾藻多糖的应用, 专利申请号: 201610334072.9。等

研究生培养等教学情况：

目前, 正培养三个研究生

奖励和荣誉：

- 1, 中国科学院优秀博士学位论文, 中国科学院, 2015年。
- 2, 中国科学院院长优秀奖, 中国科学院, 2014年。
- 3, 中国科学院海洋研究所优秀博士学位论文一等奖, 中国科学院海洋研究所, 2014年。
- 4, 优秀毕业生, 中国科学院, 2014年。
- 5, 吉林省科学技术奖(二等奖)等

其他：

Scientific reports, *International Journal of Biological Macromolecules*, *Future Microbiology*, *Current Pharmaceutical Analysis* 等国际期刊的审稿人。