



# 王猛

东北师范大学地理科学学院

---

职 称：教授

研究方向：湿地生态学；生物地球化学

办公电话：0431-85098982

办公地点：地理科学学院219室

电子邮件：wangm581@nenu.edu.cn

## 个人简历

王猛，山东青岛人，1983年4月生，教授，博士生导师。入选吉林省第七批“拔尖创新人才”第三层次。

国际泥炭地学会理事（观察员），吉林省泥炭地学会副理事长。长白山地理过程与生态安全教育部重点实验室、国家环境保护湿地生态与植被恢复重点实验室固定人员。主要研究泥炭地植被与土壤的相互关系，以及全球变化背景下，泥炭地生态系统的生物地球化学循环和化学计量学特征。在Soil Biology and Biochemistry、Global Biogeochemical Cycles、Geoderma、Plant and Soil、Environmental Research Letters、Ecosystems、Science of the Total Environment、Atmospheric Environment、Oecologia、Catena等期刊上发表SCI论文50余篇。为New Phytologist、Ecology、Environment International、Biogeochemistry、Agriculture, Ecosystems & Environment、Plant and Soil、Applied Soil Ecology、Land Degradation & Development、Science of the Total Environment、Ecosystems、Ecological Engineering、Ecological Indicators、Land Degradation &

Development等期刊的审稿人。

英文科研主页: [https://www.researchgate.net/profile/Meng\\_Wang42](https://www.researchgate.net/profile/Meng_Wang42)

博士生招生专业: 湿地科学

硕士生招生专业: 湿地科学、自然地理学

教育经历:

2009/09 ~ 2014/10, 加拿大McGill大学地理系, 自然地理学

2006/09 ~ 2009/07, 浙江大学生命科学学院, 生态学

2002/09 ~ 2006/07, 青岛科技大学化工学院, 生物工程

工作经历:

2019/07, 加拿大McGill大学地理系, 访问教授

2018/10 ~ 今, 东北师范大学地理科学学院, 教授

2014/11 ~ 2018/09, 西北农林科技大学, 副教授

指导 (含共同指导) 研究生名单:

博士生:

张俊俊 (2018届)

魏华 (2018届)

杨斌 (2019届)

郭欣怡 (在读)

李通 (在读)

索语晨 (在读)

硕士生:

张明莹 (2020届)

刘文艳 (2020届)

葛乐明 (在读)

黄晶晶 (在读)

袁欣 (在读)

何玉杰 (在读)

曹晨昊 (在读)

朱琳 (在读)

林丽颖 (在读)

裴旭英 (在读)

发表论文:

2021年

[56] Yuan, M. S., Zhu, Q. A.\*, Zhang, J., Liu, J. X., Chen, H., Peng, C. H., Li, P., Li, M. X., Wang, M., Zhao, P. X. 2020. Global response of terrestrial gross primary productivity to climate extremes. *Science of the Total Environment*, 750:142337. <https://doi.org/10.1016/j.scitotenv.2020.142337>

2020年

- [55] Zhang, J., Zhu, Q. A.\* , Yuan, M. S., Liu, X. W., Chen, H., Peng, C. H., Wang, M., Yang, Z. A., Jiang, L., Zhao P. X.\* 2020. Extrapolation and uncertainty evaluation of carbon dioxide and methane emissions in the Qinghai-Tibetan plateau wetlands since the 1960s. *Frontiers in Earth Science*, 8:361. <https://doi.org/10.3389/feart.2020.00361>
- [54] Li, T., Ge, L. M., Huang, J. J., Yuan, X., Peng, C. H., Wang, S. Z., Bu, Z. J., Zhu, Q. A., Wang, Z. C., Liu, W. G., Wang, M.\* 2020. Contrasting responses of soil exoenzymatic interactions and the dissociated carbon transformation to short- and long-term drainage in a minerotrophic peatland. *Geoderma*, 377:114585. <https://doi.org/10.1016/j.geoderma.2020.114585>
- [53] Du, Y. Y., Luo, B., Han, W. J., Duan, Y. Y., Yu, C. C., Wang, M., Ge, Y., Chang, J.\* 2020. Increasing plant diversity offsets the influence of coarse sand on ecosystem services in microcosms of constructed wetlands. *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-020-09592-5>
- [52] Zhang, J. J., Peng, C. H., Xue, W., Yang, B., Yang, Z. A., Niu, S. L., Zhu, Q. A., Wang, M.\* 2020. Dynamics of soil water extractable organic carbon and inorganic nitrogen and their environmental controls in mountain forest and meadow ecosystems in China. *Catena*, 187:104338. <https://doi.org/10.1016/j.catena.2019.104338>
- [51] Song, H. X., Huang, J. J., Ge, L. M., Peng, C. H., Zhao, P. X.\* , Guo, X. Y., Li, T., Shen, X. J., Zhu, Q. A., Liu, W. G., Wei, H., Wang, M.\*\* 2020. Interspecific difference in N:P stoichiometric homeostasis drives nutrient release and soil microbial community composition during decomposition. *Plant and Soil*, 452:29-42. <https://doi.org/10.1007/s11104-020-04513-4>
- [50] Li, P., Zhu, Q. A., Peng, C. H.\* , Zhang, J., Wang, M., Zhang, J. J., Ding, J. H., Zhou, X. L. 2020. Change in autumn vegetation phenology and the climate controls from 1982 to 2012 on the Qinghai-Tibet Plateau. *Frontiers in Plant Sciences*, <https://doi.org/10.3389/fpls.2019.01677>.
- [49] Zhang, J., Ding, J. H., Zhang, J., Yuan, M. S., Li, P., Xiao, Z. Y., Peng, C. H., Chen, H., Wang, M., Zhu, Q. A.\* 2020. Effects of increasing aerosol optical depth on the gross primary productivity in China during 2000-2014. *Ecological Indicators*, 108:105761.

<https://doi.org/10.1016/j.ecolind.2019.105761>

2019年

[48] 杨斌, 彭长辉\*, 张贤, 刘伟国, 段敏, 王猛. 2019. 干旱胁迫对刺槐幼苗叶片氮含量、光合速率及非结构性碳水化合物的影响. 应用于环境生物学报, 25

(6):1261-1269. <https://doi.org/10.19675/j.cnki.1006-687x.2019.03011>

[47] Li, T., Bu, Z. J., Liu, W. Y., Zhang, M. Y., Peng, C. H.\*, Zhu, Q. A., Shi, S. W., Wang, M.\*\* 2019. Weakening of the 'enzymatic latch' mechanism following long-term fertilization in a minerotrophic peatland. *Soil Biology and Biochemistry*, 136:107258.

<https://doi.org/10.1016/j.soilbio.2019.107528>

[46] Wang, M.\*#, Tian, J. Q.#, Bu, Z. J., Lamit, J. L., Chen, H., Zhu, Q. A., Peng, C. H. 2019. Structural and functional differentiation of the microbial community in the surface and subsurface peat of two minerotrophic fens in China. *Plant and Soil*, 437:21-40. <https://doi.org/10.1007/s11104-019-03962-w>

[45] Smith, N. G.\*, Keenan, T. F., Prentice, I. C., Wang, H., Wright, J., Niinemets, Ü., Grous, K Y., Domingues, T. F., Guerrieri, R., Ishida, F. Y., Kattge, J., Kruger, E L., Maire, V., Rogers, A., Serbin, S. P., Tarvainen, L., Togashi, H. F., Townsend, P. A., Wang, M., Weerasinghe, L. K., Zhou, S. X. 2019. Global photosynthetic capacity is optimized to the environment. *Ecology Letters*, 22:506-517. <https://doi.org/10.1111/ele.13210>

[44] Shi, S. W., Yang, M. X., Hou, Y., Peng, C. H.\*, Wu, H. B., Zhu, Q. A., Liang, Q., Xie, J. F., Wang, M. Simulation of dissolved organic carbon concentrations and fluxes in Chinese monsoon forest ecosystems using a modified TRIPLEX-DOC model. *Science of the Total Environment*, 697:134054. <https://doi.org/10.1016/j.scitotenv.2019.134054>

[43] Guo, Y. R., Peng, C. H.\*, Zhu, Q. A., Wang, M., Wang, H., Peng, S. S., He, H. L. 2019. Modelling the impacts of climate and land use changes on soil water erosion: Model applications, limitations and future challenges. *Journal of Environmental Management*, 250:109403.

<https://doi.org/10.1016/j.jenvman.2019.109403>

[42] Pan, K. X., Lu, Y. J., He, S. N., Yang, G. F., Chen, Y., Fan, X., Ren, Y., Wang, M., Zhu, K. D., Shen, Q., Jiang, Y. P., Shi, Y., Meng, P. P., Tang, Y. L.,

- Chang, J., Ge, Y.\* 2019. Urban green spaces as potential habitats for introducing a native endangered plant, *Calycanthus chinensis*. *Urban Forestry & Urban Greening*, 46:126444. <https://doi.org/10.1016/j.ufug.2019.126444>
- [41] Zhang, K. R., Zhu, Q. A.\*, Liu, J. X., Wang, M., Zhou, X. L., Li, M. X., Wang, K. F., Ding, J. H., Peng, C. H.\* 2019. Spatial and temporal variations of N<sub>2</sub>O emissions from global forest and grassland ecosystems. 266-267:129-139. <https://doi.org/10.1016/j.agrformet.2018.12.011>
- [40] Wang, K. F., Peng, C. H.\*, Zhu, Q. A., Wang, M., Wang, G. S., Zhou, X. L., Yang, Y. Z., Ding, J. H., Wei, H. 2019. Changes in soil organic carbon and microbial carbon storage projected during the 21st century using TRIPLEX-MICROBE. *Ecological Indicators*, 98:80-87. <https://doi.org/10.1016/j.ecolind.2018.10.045>

#### 2018年

- [39] Yang, B., Peng, C. H.\*, Harrison, S. P., Wei, H., Wang, H., Zhu, Q. A., Wang, M. 2018. Allocation mechanisms of non-structural carbohydrates of *Robinia pseudoacacia* L. seedlings in response to drought and waterlogging. *Forests*, 9:754. <https://doi.org/10.3390/f9120754>
- [38] Moore, T. R.\*, Large, D., Talbot, J., Wang, M., Riley, J. L. 2018. The stoichiometry of carbon, hydrogen and oxygen in peat. *Journal of Geophysical Research: Biogeosciences*, 123:3101-3110. <https://doi.org/10.1029/2018JG004574>
- [37] Feng, L., Sundberg, S., Ooi, M., Wu, Y. H., Wang, M., Bu, Z. J.\* 2018. Oxygen-deficiency and allelochemicals affect *Sphagnum* spore persistence in peatlands. *Plant and Soil*, 432:403-413. <https://doi.org/10.1007/s11104-018-3809-0>
- [36] Wei, H., Peng, C. H.\*, Yang, B., Song, H. X., Li, Q., Jiang, L., Wei, G., Wang, K. F., Wang, H., Liu, S. R., Liu, X. J., Chen, D. X., Li, Y. D., Wang, M.\* 2018. Contrasting soil bacterial community, diversity, and function in two forests in China. *Frontiers in Microbiology*, 9:1693. <https://doi.org/10.3389/fmicb.2018.01693>
- [35] Li, P., Peng, C. H.\*, Wang, M., Luo, Y. P., Li, M. X., Zhang, K. R., Zhang, D. L., Zhu, Q. A.\*\* 2018. Dynamics of vegetation autumn phenology and its response to multiple environmental factors from 1982 to 2012 on Qinghai-Tibetan Plateau in China. *Science of the Total Environment*, 637-638:855-864. <https://doi.org/10.1016/j.scitotenv.2018.05.031>

[34] Wei, H., Peng, C. H.\*, Liu, S. R., Liu, X. J., Li, P., Song, H. X., Yuan, M. S., Wang, M. 2018. Variation in soil methane fluxes and comparison between two forests in China. *Forests*, 9:204. <https://doi.org/10.3390/f9040204>

[33] Zhang, J. J., Peng, C. H., Xue, W., Yang, Z. A., Yang, B., Li, P., Zhu, Q. A., Wang, M.\* 2018. Soil CH<sub>4</sub> and CO<sub>2</sub> dynamics and nitrogen transformations with incubation in mountain forest and meadow ecosystems. *Catena*, 163:24-32. <https://doi.org/10.1016/j.catena.2017.12.005>

[32] Wang, M.\*, Moore, T. R., Talbot, J. 2018. Drainage and fertilization effects on nutrient availability in an ombrotrophic peatland. *Science of the Total Environment*, 621:1255-1263. <https://doi.org/10.1016/j.scitotenv.2017.10.103>

[31] Wang, H.\*, Harrison, S. P., Prentice, I. C., Yang, Y. Z., Bai, F., Togashi, H. F., Wang, M., Zhou, S. X., Ni, J. 2018. The China Plant Trait Database: towards a comprehensive regional compilation of functional traits for land plants. *Ecology*, 99:500-500. <https://doi.org/10.1002/ecy.2091>

2017年

[30] Talbot, J.\*, Moore, T. R., Wang, M., Riley, J. L. 2017. Distribution of lead and mercury in Ontario peatlands. *Environmental Pollution*, 231:890-898. <https://doi.org/10.1016/j.envpol.2017.08.095>

[29] Zhu, Q. A.\*, Peng, C. H.\*, Ciais, P., Jian, J., Liu, J. X., Bousquet, P., Li, S. Q., Chang, J., Fang, X. Q., Zhou, X. L., Chen, H., Liu, S. R., Lin, G. H., Gong, P., Wang, M., Wang, H., Xiang, W. H., Chen, J. Inter-annual variation in methane emissions from tropical wetlands triggered by repeated El Niño Southern Oscillation. *Global Change Biology*, 23:4706-4716. <https://doi.org/10.1111/gcb.13726>

[28] Li, M. X., Peng, C. H., Wang, M., Yang, Y. Z., Zhang, K. R., Li, P., Yang, Y., Ni, J., Zhu, Q. A.\* 2017. Journal of Geophysical Research- Biogeosciences, 122:1564-1575. <https://doi.org/10.1002/2016JG003529>

[27] Du, M. X., Peng, C. H.\*, Wang, X. G., Chen, H., Wang, M., Zhu, Q. A.\*\* 2017. Quantification of methane emissions from municipal solid waste landfills in China during the past decade. *Renewable & Sustainable Energy Reviews*, 78:272-279. <https://doi.org/10.1016/j.rser.2017.04.082>

[26] Li, M. X., Peng, C. H.\*, Wang, M., Xue, W., Zhang, K. R., Wang, K. F., Shi, G. H., Zhu, Q. A.\*\* 2017. The carbon flux of global rivers: A re-evaluation of amount and spatial patterns. *Ecological Indicators*, 80:40-51. <https://doi.org/10.1016/j.ecolind.2017.04.049>

- [25] Li, P., Peng, C. H.\*, Wang, M., Li, W. Z., Zhao, P. X., Wang, K. F., Yang, Y. Z., Zhu, Q. A.\* 2017. Quantification of the response of global terrestrial net primary production to multifactor global change. *Ecological Indicators*, 76:245-255. <https://doi.org/10.1016/j.ecolind.2017.01.021>
- [24] Wang, K. F., Peng, C. H.\*, Zhu, Q. A., Zhou, X. L., Wang, M., Zhang, K. R., Wang, G. S. 2017. Modeling global soil carbon and soil microbial carbon by integrating microbial processes into the ecosystem process model TRIPLEX-GHG. *Journal of Advances in Modelling Earth Systems*, 9:2368-2384. <https://doi.org/10.1002/2017MS000920>
- [23] Zhang, K. R., Peng, C. H.\*, Wang, M., Zhou, X. L., Li, M. X., Wang, K. F., Ding, J. H., Zhu, Q. A.\*\* 2017. Process-based TRIPLEX-GHG model for simulating N<sub>2</sub>O emissions from global forests and grasslands: Model development and evaluation. *Journal of Advances in Modelling Earth Systems*, 9:2079-2102. <https://doi.org/10.1002/2017MS000934>

#### 2016年

- [22] Wang, M.\*, Larmola, T., Murphy, M. T., Moore, T. R., Bubier, J. T. 2016. Stoichiometric response of shrubs and mosses to long-term nutrient (N, P and K) addition in an ombrotrophic peatland. *Plant and Soil*, 400:403-416. <https://doi.org/10.1007/s11104-015-2744-6>
- [21] Zhang, J. J., Peng, C. H.\*, Zhu, Q. A., Xue, W., Shen, Y., Yang, Y. Z., Shi, G. H., Shi, S. W., Wang, M.\*\* 2016. Temperature sensitivity of soil carbon dioxide and nitrous oxide emissions in mountain forest and meadow ecosystems in China. *Atmospheric Environment*, 142:340-350. <https://doi.org/10.1016/j.atmosenv.2016.08.011>
- [20] Zhu, Q. A.\*, Peng, C. H.\*, Liu, J. X., Jian, J., Fang, X. Q., Chen, H., Niu, Z. G., Gong, P., Lin, G. H., Wang, M., Wang, H., Yang, Y., Chang, J., Ge, Y., Xiang, W. H., Deng, X. W., He, J. S. 2016. Climate-driven increase of natural wetland methane emissions offset by human-induced wetland reduction in China over the past three decades. *Scientific Reports*, 6:38020. <https://doi.org/10.1038/srep38020>
- [19] Fan, M. Y., Pan, K. X., Han, W. J., Lu, Y. J., Shen, Q., Wang, M., Ren, Y., Qu, Z. L., Chang, J., Ge, Y.\* 2016. A strategy for introducing an endangered plant *Mosla hangchowensis* to urban area based on nitrogen preference. *Acta Physiologiae Plantarum*, 38:265. <https://doi.org/10.1007/s11738-016-2278-4>



- [18] Shi, G. H., Peng, C. H.\*, Wang, M., Shi, S. W., Yang, Y. Z., Chu, J. Y., Zhang, J. J., Lin, G. H., Shen, Y., Zhu, Q. A.\*\* 2016. The spatial and temporal distribution of dissolved organic carbon exported from three Chinese rivers to the China Sea. *PLoS ONE*, 11:e0165039. <https://doi.org/10.1371/journal.pone.0165039>
- [17] Zhao, Z. Y., Chang, J., Han, W. J., Wang, M., Ma, D. P., Du, Y. Y., Qu, Z. L., Chang, S. X., Ge, Y.\* 2016. Effects of plant diversity and sand particle size on methane emission and nitrogen removal in microcosms of constructed wetlands. *Ecological Engineering*, 95:390-398. <https://doi.org/10.1016/j.ecoleng.2016.06.047>
- [16] Shi, S. W., Peng, C. H.\*, Wang, M., Zhu, Q. A., Yang, G., Yang, Y. Z., Xi, T. T., Zhang, T. L. 2016. A global meta-analysis of changes in soil carbon, nitrogen, phosphorus and sulfur, and stoichiometric shifts after forestation. *Plant and Soil*, 407:323-340. <https://doi.org/10.1007/s11104-016-2889-y>
- [15] Yang, Y. Z., Zhu, Q. A.\*, Peng, C. H., Wang, H., Xue, W., Lin, G. H., Wen, Z. M., Chang, J., Wang, M., Liu, G. B., Li, S. Q. 2016. A novel approach for modelling vegetation distributions and analysing vegetation sensitivity through trait-climate relationships in China. *Scientific Reports*, 6:24110. <https://doi.org/10.1038/srep24110>
- [14] Song, X. Z.\*, Gu, H. H., Wang, M., Zhou, G. M., Li, Q. 2016. Management practices regulate the response of Moso bamboo foliar stoichiometry to nitrogen deposition. *Scientific Reports*, 6:24107. <https://doi.org/10.1038/srep24107>

#### 2015年

- [13] Wang, M., Moore, T. R.\*, Talbot, J., Riley, J. L. 2015. The stoichiometry of carbon and nutrients in peat formation. *Global Biogeochemical Cycles*, 29:113-121. <https://doi.org/10.1002/2014GB005000>
- [12] Liu, J. G., Chen, H., Zhu, Q. A., Shen, Y., Wang, X., Wang, M., Peng, C. H. 2015. A novel pathway of direct methane production and emission by eukaryotes including plants, animals and fungi: An overview. *Atmospheric Environment*, 115:26-35. <https://doi.org/10.1016/j.atmosenv.2015.05.019>

2014年

[11] Wang, M.\*, Moore, T. R., Talbot, J., Richard P. J. H. 2014. The cascade of C:N:P stoichiometry in an ombrotrophic peatland: from plants to peat. *Environmental Research Letters*, 9:024003. <https://doi.org/10.1088/1748-9326/9/2/024003>

[10] Wang, M.\*, Moore, T. R. 2014. Carbon, nitrogen, phosphorus and potassium stoichiometry in an ombrotrophic peatland reflects plant functional type. *Ecosystems*, 17:673-684. <https://doi.org/10.1007/s10021-014-9752-x>

[9] Wang, M.\*, Murphy, T. M., Moore, T. R. 2014. Nutrient resorption of two evergreen shrubs in response to long-term fertilization in a bog. *Oecologia*, 174:365-377. <https://doi.org/10.1007/s00442-013-2784-7>

[8] Lu, Y. J., Wang, M., Ge, Y., Fu, C. X., Chang, J.\* 2014. Response of photosynthetic and morphological characteristic of *Mosla chinensis* and congenerous weed *M. scabra* to soil water content. *Russian Journal of Ecology*, 45:367-374. <https://doi.org/10.1134/S106741361405018X>

2013年

[7] 曾竞, 卜兆君\*, 王猛, 马进泽, 赵红艳, 李鸿凯, 王升忠. 2013. 氮沉降对泥炭地影响的研究进展. *生态学杂志*, 32(2):473-481.

2011年

[6] Chu, Z. Y., Ge, Y., Chang, J.\*, Wang, M., Jiang, H., He, J. S., Peng, C. H. 2011. Leaf respiration/photosynthesis relationship and variation: an investigation of 39 woody and herbaceous species in east subtropical China. *Trees*, 25:301-310. <https://doi.org/10.1007/s00468-010-0506-x>

2010年

[5] Wang, M., Chang, J., Ge, Y.\*, Chang, S. X.\*, Huang, C. C., Wang, S. Y. 2010. Ecophysiological differentiation of two *Mosla* species in response to nitrogen and water levels. *Communications in Soil Science and Plant Analysis*, 41:2699-2712. <https://doi.org/10.1080/00103624.2010.518262>

[4] Chang, J., Wang, M., Guan, B. H., Gu, B. J., Jiang, D. A., Liu, Z., Liao, J. X., Ge, Y.\* 2010. Responses of a widespread weed and an endangered congeneric plant to potassium. *Communications in Soil Science and Plant Analysis*, 41:571-583.

<https://doi.org/10.1080/00103620903531151>

[3] Cao, Q. J., Wang, M., Ge, Y., Chang, J.\*, Chang, S. X., Zhang, J. M. 2010. Growth responses of two *Mosla* species to soil nitrogen and water supply. *Botanical Studies*, 51:451-456.

2009年

[2] Wang, M., Gu, B. J., Ge, Y., Liu, Z., Jiang, D. A., Chang, S. X., Chang, J.\* 2009. Different responses of two *Mosla* species to potassium limitation in relation to acid rain deposition. *Journal of Zhejiang University-Science B*, 10:563-571. <https://doi.org/10.1631/jzus.B0920037>

[1] 张建民, 王猛, 葛晓萍, 吴建之, 葛滢\*, 李世鹏, 常杰. 2009. ICP-AES法与传统FAAS法测定土壤速效钾和钠的数据可转性研究. *光谱学与光谱分析*, 29(5):1405-1408.

科研项目:

主持和参与科研项目10余项, 其中, 主持国家自然科学基金2项, 省部级项目1项:

- 1) 长白山哈泥泥炭地土壤胞外酶活性的化学计量特征的生物调控机制 (419711118), 国家自然科学基金面上项目, 2020.01 ~ 2023.12
- 2) 氮磷输入对长白山泥炭地土壤有机碳影响的酶学机理研究 (41601098), 国家自然科学基金青年项目, 2017.01 ~ 2019.12
- 3) 锐齿栎和油松的凋落物-土壤-微生物的生态化学计量学级联特征 (2016JQ3022), 陕西省自然科学基金青年项目, 2016.01 ~ 2017.12

## 社会兼职

## 获奖情况



教学信息



科研信息 (数据来源: 科学技术处、社会科学处)



信息维护