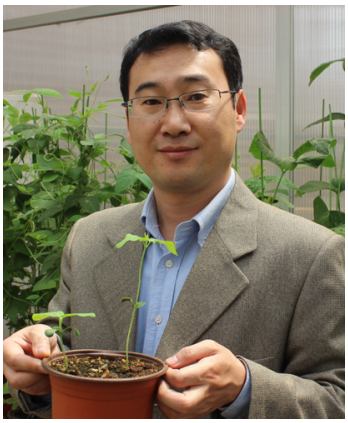
吴建强简历

联系方式



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研究方向

1. 玉米抗虫分子机制
2. 植物与寄生植物相互作用

学习经历

2001.09-2007.11	**植物分子生物学，博士** 论文：molecular study of the trypsin proteinase inhibitor defense mechanism and early herbivory-induced signaling in *Nicotiana*	德国马普化学生态学研究所分子生态学研究室; 导师：Ian T. Baldwin 教授 (美国科学院院士)
1995.09 – 1998.07	**分析化学，硕士** 论文: application of cyclodextrin-derivative stationary phases in separation of aromatic positional isomers in gas chromatography	中国科学院大连化学物理研究所；导师：朱道乾研究员
1991.09-1995.07	**化学工程学（无机化工），学士**	大连理工大学 化工学院

工作经历

2012.04–至今: 中国科学院昆明植物研究所，研究员，课题组长，博导

2007.01–2012.04: 课题负责人（Group Leader），德国马普化学生态学研究所

1998.10–2001.08: 中国科学院大连化学物理研究所，分析化学研究室，研究实习员

学术任职

1. 中国科学院昆明植物研究所学术委员会，副主任（2020.06-2025.05）
2. 中国植物学会，第十七届理事会理事（2023.10-2028.10）
3. 中国植物生理与植物分子生物学学会第十三届常务理事（2024.08-2029.08）
4. 中国生态学学会第五届化学生态专业委员会，副主任委员（2022.10-2027.10）
5. Journal of Integrative Plant Biology 编委 (2011-2025.12)
6. Plant Diversity 主编（2020.8-2025.12）
7. Journal of Ecology and Environment 编委 (2023.01-2026.12)
8. Journal of Systematics and Evolution 编委 (2024.04-2028.12)
9. 中国科学院大学第六届学位评定委员会生命科学学位评定分委员会委员（2023.12-2028.12）
10. 云南省野生资源植物研发重点实验室，学术委员会委员（2020-2024）
11. 云南省真菌多样性与绿色发展重点实验室，学术委员会委员（2021-2022）

以往学术任职情况

1. 云南省党外知识分子联谊会，常务理事（2020-2023）
2. 中国生态学学会第四届化学生态专业委员会委员（2017.10-2022.10）
3. Plant Diversity 编委（2015-2020）
4. 云南省植物学会第十三届理事会理事，兼繁殖生态与生物互作专业委员会主任委员（2020.11-2024.08）
12. 中国植物生理与植物分子生物学学会常务理事，兼青年工作委员会委员（第十二届；2019.7-2024.07）
5. 中国昆虫学会第十一届理事会化学生态学专业委员会副主任（2023.02-2024.08）

行政任职情况

1. 2014.10-2020.05：资源植物与生物技术重点实验室，副主任

2. 2020.06-2023.11：资源植物与生物技术重点实验室，主任
3. 2021.07-至今：中国科学院昆明植物研究所，副所长

人才项目情况

1. 2021 年，入选国家第六批万人计划科技领军人才
2. 2019 年，获国务院政府特殊津贴
3. 2012 年，云南省海外高层次人才计划
4. 2012 年，中共中央组织部，青年千人计划

获奖情况

1. 2022.09，入选中国科学院大学“领雁银奖—振翅奖“
2. 2008 年, Otto Hahn 奖章, 德国马普学会

基金与项目

1. 2024.01-2026.12，云南省“兴滇英才支持计划”云岭学者专项项目
2. 2024.01-2027.12，国家自然科学基金委，区域创新发展联合基金（编号：U23A20199），“转录因子 EIN3 和 MYC2 互作调控玉米对草地贪夜蛾抗性机理研究
3. 2024.01-2026.12，云南省“兴滇英才支持计划”项目，“栽培番茄与菟丝子互作中关键因子挖掘和调控网络构建”
4. 2022.06-2025.05, 云南省基础研究计划重点项目，“栽培番茄中抗菟丝子寄生的基因克隆及功能研究”
5. 2021.01-2023.12, 云南省创新团队项目，“中国科学院昆明植物研究所玉米抗虫分子机理研究省创新团队”
6. 2020.06-2023.05，云南省基础研究计划重点项目，“密环菌与天麻互作分子机理的研究”
7. 2020.01-2023.12，国家自然科学基金委，面上项目（编号：31970274），“菟丝子介导的磷胁迫系统性信号在寄主植物间长距离运输研究”
8. 2018.01-2020.12，中国科学院对外合作重点项目（编号：151853KYSB20170025），“寄生植物菟丝子在不同寄主间转导氮胁迫系统性信号的研究” （已结题）
9. 2016.01-2019.12，国家基金委-云南省联合基金（编号：U1502263），“玉米丝裂原活化蛋白激酶（MAPK）信号系统抗虫功能及分子机理研究”（已结题）

10. 2015.01-2018.12，国家自然科学基金委，面上项目（编号：31470369），“大气 CO_2 浓度升高对野生烟草抗虫能力的影响及分子机理研究” （已结题）
11. 2014.07-2019.06, 中国科学院先导专项“作物病虫害的导向性防控--生物间信息流与行为操控”课题，“农作物抗虫信号流传递与调控网络研究”（编号：XDB11050200）
12. 2013.10-2018.09, 马普伙伴小组国际合作项目，“Host-parasitic plant interactions” （已结题）
13. 2012.12-2015.11, 云南省高端人才计划（编号：2012HA016），“重要经济作物抗虫分子机理研究” （已结题）
14. 2012.12-2015.11，云南省海外高层次人才计划（已结题）
15. 2012.01-2014.12, 中共中央组织部，青年千人计划（已结题）
16. 2011.12, 欧盟玛丽居里奖学金 (获 96.1 分) (合作者: Detlef Weigel 教授, 德国马普发育生物学研究所，Lynne E. Maquat 教授, 美国罗切斯特大学，均为美国科学院院士)

发表文章 (* 通信或共同通讯作者; # 共同第一作者)

通讯作者及第一作者论文

2025

1. Yang, J., Shen, G., **Wu, J.*** (2025) Jasmonic acid and salicylic acid transcriptionally regulate *CuRe1* in cultivated tomato to activate resistance to parasitization by dodder *Cuscuta australis*. **Plant Diversity** (in press).
2. Zheng, X., Zhang, J., Zhao, M., Su, Z., Li, H., **Wu, J.*** (2025) Strigolactones, ROS, and ABA regulate systemic salt-tolerance priming signals between dodder-connected tobacco plants. **Plant Cell & Environment** (in press).

   https://pubmed.ncbi.nlm.nih.gov/39980353/
3. Su, Z., Li, H., Xu, Y., Zhang, C., **Wu, J.*,** Yun, L.* (2025) Agrobacterium tumefaciens-mediated transformation system for an *Armillaria* species, a host of the fully mycoheterotrophic plant *Gastrodia elata*. **Folia Microbiologica** (In press).

   https://pubmed.ncbi.nlm.nih.gov/39644422/
4. Zhao, M., Zheng, X., Su, Z., Shen, G., Xu, Y., Feng, Z., Li, W., Zhang, S., Cao, G., Zhang, J.*, **Wu, J.*** (2025) MicroRNA399s and strigolactones mediate systemic phosphate signaling between dodder-connected host plants and control the association of host plants with rhizosphere microbes. **New Phytologist** 245:1263-1276.

   https://pubmed.ncbi.nlm.nih.gov/39555671/

2024

5. Li, S., Ma, C., Li, S., Zhang, M., Zhang, C., Qi, J., Wang, L., Wu, X., Li, J.*, **Wu, J.*** MPK4 phosphorylates MYC2 transcription factors to regulate jasmonic acid signaling and herbivory responses in maize. **Plant Physiology** 197:kiae575.

   https://pubmed.ncbi.nlm.nih.gov/39471326/

6. Setotaw, Y.B.[#], Li, J.[#], Qi, J., Ma, C., Zhang, M., Huang C., Wang, L., **Wu, J.*** (2024) Salicylic acid positively regulates maize defenses against lepidopteran insects. **Plant Diversity** 46:519-529

   https://pubmed.ncbi.nlm.nih.gov/39280976/

7. Wang, L., Ma, C., Wang, S., Yang F., Sun, Y., Tang, J., Luo, J., **Wu, J.*** (2024) Ethylene and jasmonate signaling converge on gibberellin catabolism during thigmomorphogenesis in Arabidopsis. **Plant Physiology** 194:758-773.

   https://pubmed.ncbi.nlm.nih.gov/37847103/

   评述文章

   Plant Physiology 评述（News and Views）

   https://academic.oup.com/plphys/advance-article/doi/10.1093/plphys/kiad588/7334396

8. Zhang, J.[#], Li, S.[#], Li, W.[#], Feng, Z., Zhang, S., Zheng, X., Xu, Y., Shen, G., Zhao, M., Cao, G., Wu, X.*, **Wu, J.*** (2023) Large-scale interplant exchange of macromolecules between soybean and dodder under nutrient stresses. **Plant Diversity** 46:116-125.

   https://pubmed.ncbi.nlm.nih.gov/38343599/

2023

9. **Wu, J.*** (2023) Plant biology: Young maize leaves 'smell' a volatile danger signal. **Current Biology** 33:R914-R916.

   https://pubmed.ncbi.nlm.nih.gov/37699351/

10. Shen, G.[#], Zhang, J.[#], Lei, Y., Xu, Y., **Wu, J.*** (2023) Between-Plant Signaling. **Annual Review of Plant Biology** 74:367-386.

    https://www.ncbi.nlm.nih.gov/pubmed/36626804

11. Ma, C., Li, R., Sun, Y., Zhang, M., Li, S., Xu, Y., Song, J., Li, J., Qi, J., Wang, L.*, **Wu, J.*** (2022) ZmMYC2s play important roles in maize responses to simulated herbivory and jasmonate. **Journal of Integrative Plant Biology** 65:1041-1058.

    https://www.ncbi.nlm.nih.gov/pubmed/36349965

2022

12. Xue, N., Zhan, C., Song, J., Li, Y., Zhang J., Qi, J., **Wu, J.*** (2022) The glutamate receptor-like 3.3 and 3.6 mediate systemic resistance to insect herbivores in Arabidopsis. **Journal of Experimental Botany** 73:7611-7627.

    https://www.ncbi.nlm.nih.gov/pubmed/36214841

13. Xu, Y., Zhang, J., Ma, C., Lei, Y., Shen, G., Jin, J. J., Eaton, D. A., **Wu, J.*** (2022) Comparative genomics of orobanchaceous species with different parasitic lifestyles reveals the origin and stepwise evolution of plant parasitism. **Molecular Plant** 15:1384-1399.

    https://www.ncbi.nlm.nih.gov/pubmed/35854658

14. Song, J.[#], Bian, J.[#], Xue, N., Yu, X, **Wu, J.*** (2022) Inter-species mRNA transfer among green peach aphids, dodder parasites, and cucumber host plants. **Plant Diversity** 44:1-10.

    https://pubmed.ncbi.nlm.nih.gov/35281124

2021

15. Xu, Y.[#], Lei, Y.[#], Su, Z., Zhao, M., Zhang, J., Shen, G., Wang, L., Li, J., Qi, J., **Wu, J.*** (2021) A chromosome-scale *Gastrodia elata* genome and large-scale comparative genomic analysis indicate convergent evolution by gene loss in mycoheterotrophic and parasitic plants. **Plant Journal** 108:1609-1623.

    https://pubmed.ncbi.nlm.nih.gov/34647389/

16. Lei, Y., Xu, Y., Zhang, J., Song, J., **Wu, J.*** (2021) Herbivory-induced systemic signals are likely evolutionarily conserved in euphyllophytes. **Journal of Experimental Botany** 72: 7274-7284.

    https://www.ncbi.nlm.nih.gov/pubmed/34293107

17. Malook, S.U., Xu, Y., Qi, J, Li, J., Wang, L., **Wu, J.*** (2021) *Mythimna separata* herbivory primes maize resistance in systemic leaves. **Journal of Experimental Botany** 72:3792-3805.

    https://pubmed.ncbi.nlm.nih.gov/33647931/

18. Zhang, J., Xu, Y., Xie, J., Zhuang, H., Liu, H., Shen, G.*, **Wu, J.*** (2021) The parasite *Cuscuta campestris* enables transfer of bidirectional systemic nitrogen signals between host plants. **Plant Physiology** 185:1395–1410.

    https://pubmed.ncbi.nlm.nih.gov/33793912/

19. Zhang, C., Li, J., Li, S., Ma, C., Liu, H., Wang, L., Qi, J.*, **Wu, J.*** (2021) ZmMPK6 and ethylene signaling negatively regulate the accumulation of anti-insect metabolites DIMBOA and DIMBOA-Glc in maize inbred line A188. **New Phytologist** 229:2273-2287.

    https://pubmed.ncbi.nlm.nih.gov/32996127

2020

20. Shen, G.[#], Liu, N.[#], Zhang, J., Xu, Y., Baldwin, I.T., **Wu, J.*** (2020) *Cuscuta australis* (dodder) parasite eavesdrops on the host plants'FT signals to flower. **Proceedings of National Academy of Sciences of the USA** 117: 23125-23130
    https://www.ncbi.nlm.nih.gov/pubmed/32868415
21. Li, S., Zhang, J., Liu, H., Liu, N., Shen, G., Zhuang, H., **Wu, J.*** (2020) Dodder-transmitted mobile signals prime host plants for enhanced salt tolerance. **Journal of Experimental Botany** 71:1171-1184
    https://www.ncbi.nlm.nih.gov/pubmed/31665509

    评述文章

    J. Exp. Bot. 评述（Insight）https://academic.oup.com/jxb/article/71/3/749/5714585

22. Zhang, C., Lei, Y., Lu, C., Wang, L.*, **Wu, J.*** (2020) MYC2, MYC3, and MYC4 function additively in wounding-induced jasmonic acid biosynthesis and catabolism. **Journal of Integrative Plant Biology** 62:1159-1175
    https://www.ncbi.nlm.nih.gov/pubmed/31876387
23. Liu, N., Shen, G., Xu Y., Liu, H., Zhang, J., Li, S., Li, J., Zhang, C., Qi, J., Wang, L., **Wu, J.*** (2020) Extensive inter-plant protein transfer between *Cuscuta* parasites and their host plants. **Molecular Plant** 13:573-585
    https://www.ncbi.nlm.nih.gov/pubmed/31812691

    评述文章

    1）Molecular Plant 评述（Spotlight）
    https://www.sciencedirect.com/science/article/pii/S1674205220300071?via%3Dihub
    2）Nature Plants 评述（Research Highlights）
    https://www.nature.com/articles/s41477-019-0583-9

2019

24. Qin. Y., Zhang, J., Hettenhausen, C., Liu, H., Li, S., Shen, G., Cao, G., **Wu, J.*** (2019) The host jasmonic acid pathway regulates the transcriptomic changes of dodder and host plant under the scenario of caterpillar feeding on dodder. **BMC Plant Biology** 19:540. https://www.ncbi.nlm.nih.gov/pubmed/31801469
25. Gao, L., Shen, G., Zhang, L., Qi, J., Zhang, C., Ma, C., Li, J., Wang, L., Malook, S.U., **Wu, J.*** (2019) An efficient system composed of maize protoplast transfection and HPLC-MS for studying the biosynthesis and regulation of maize benzoxazinoids. **Plant Methods** 15:144. https://www.ncbi.nlm.nih.gov/pubmed/31798670
26. Malook, S.[#], Qi, J.[#], Hettenhausen, C.[#], Xu, Y., Zhang, C., Zhang, J., Lu, C., Li, J., Wang, L., **Wu, J.*** (2019) The oriental armyworm (*Mythimna separata*) feeding induces systemic defense responses within and between maize leaves. **Philosophical Transactions of the Royal Society B** 374: 20180307 https://www.ncbi.nlm.nih.gov/pubmed/30967023

2018

27. **Wu, J.*** (2018) miRNAs as a secret weapon in the battlefield of haustoria, the interface between parasites and host plants. **Molecular Plant 11,** 354–356. https://www.ncbi.nlm.nih.gov/pubmed/29462721
28. Qi, J., Malook, S., Shen, G., Gao, L., Zhang, C., Li, J., Zhang, J., Wang, L., **Wu, J.*** (2018) Current understanding of maize and rice defense against insect herbivores. **Plant Diversity** 40: 189-195. https://www.sciencedirect.com/science/article/pii/S2468265918300696
29. Sun, G.[#], Xu, Y.[#], Liu, H.[#], Sun, T., Zhang, J., Hettenhausen, C., Shen, G., Qi, J., Qin, Y., Li, J., Wang, L., Chang, W., Guo, Z., Baldwin, I.T., **Wu, J.*** (2018) Large-scale gene losses underlie the genome evolution of parasitic plant *Cuscuta australis*. **Nature Communications** 9:2683. https://www.ncbi.nlm.nih.gov/pubmed/29992948

    评述文章

    Science 评述（In other Journals）
    https://science.sciencemag.org/content/361/6402/565.5/tab-pdf

30. Zhuang, H., Li, J., Song, J., Hettenhausen, C., Schuman, M., Sun, G., Zhang, C., Li, J., Song, D., **Wu, J.*** (2018) Aphid (*Myzus persicae*) feeding on the parasitic plant dodder (*Cuscuta australis*) activates defense responses in both the parasite and soybean host. **New Phytologist** 218: 1586-1596. https://www.ncbi.nlm.nih.gov/pubmed/29575001
31. Lei, Y., Xu, Y., Hettenhausen, C., Lu, C., Shen, G., Zhang, C., Li, J., Song, J., Lin, H.*, **Wu, J.*** (2018). Comparative analysis of alfalfa (*Medicago sativa* L.) leaf transcriptomes reveals genotype-specific salt tolerance mechanisms. **BMC Plant Biology** 18:35 https://www.ncbi.nlm.nih.gov/pubmed/29448940
32. Lu, C., Qi, J., Hettenhausen, C., Lei, Y., Zhang, J., Zhang, M., Zhang C., Song J., Li, J., Cao, G., Malook, S.U., **Wu, J.*** (2018) Elevated CO_2 differentially affects tobacco and rice defense against lepidopteran larvae via the jasmonic acid signaling pathway. **Journal of Integrative Plant Biology** 60: 412-431 https://www.ncbi.nlm.nih.gov/pubmed/29319235
33. Qi, J., Zhang, M., Lu, C., Hettenhausen, C., Tan, Q., Cao, G., Zhu, X., Wu, G., **Wu, J.*** (2018) Ultraviolet-B enhances the resistance of multiple plant species to

lepidopteran insect herbivory through the jasmonic acid pathway. **Scientific Reports** 8:277
https://www.ncbi.nlm.nih.gov/pubmed/29321619

2017

34. Song, J., Liu, H., Zhuang, H., Zhao, C., Xu, Y., Wu, S., Qi, J., Li, J., Hettenhausen, C.*, **Wu, J.*** (2017) Transcriptomics and alternative splicing analyses reveal large differences between maize lines B73 and Mo17 in response to aphid *Rhopalosiphum padi* Infestation. **Frontiers in Plant Science** 8:1738.
https://www.ncbi.nlm.nih.gov/pubmed/29067035
35. Hettenhausen, C.#, Li, J.#, Zhuang, H., Sun, H., Xu, Y., Qi, J., Zhang, J., Lei, Y., Qin, Y., Sun, G., Wang, L., Baldwin, I.T., **Wu, J.*** (2017) The stem parasitic plant *Cuscuta australis* (dodder) transfers herbivory-induced signals among plants. **Proceedings of National Academy of Sciences of the USA** 114: E6703-E6709.
https://www.ncbi.nlm.nih.gov/pubmed/28739895

评述文章

1) PNAS 评述（In this issue）
https://www.pnas.org/content/114/32/8433
2) Science 评述（In other Journals）
https://science.sciencemag.org/content/357/6352/657.5
3) Nature Plants（Research Highlights）
https://www.nature.com/articles/s41477-017-0015-7
4) 列入 2017 世界科技发展回顾生物医学领域亮点进展（《科技日报》，2018 年 1 月 5 日）

36. Lei, Y., Liu, Q., Hettenhausen, C., Cao, G., Tan, Q., Zhao, W., Lin, H.*, **Wu, J.*** (2017) Salt-tolerant and -sensitive alfalfa (*Medicago sativa*) cultivars have large variations in defense responses to the lepidopteran insect *Spodoptera litura* under normal and salt stress condition. **PLoS One** 12: e0181589.
https://www.ncbi.nlm.nih.gov/pubmed/28719628

2016

37. Sun, T., Renner, S., Xu, Y., Qin, Y., **Wu, J.*,** Sun, G.* (2016) Two *hAT* transposon genes were transferred from Brassicaceae to broomrapes and are actively expressed in some recipients. **Scientific Reports** 6:30192.
https://www.ncbi.nlm.nih.gov/pubmed/27452947
38. Luo, J., Wei, K., Wang, S., Zhao, W., Ma, C., Hettenhausen, C., Wu, J., Cao, G., Sun, G., Baldwin, I. T., **Wu, J.***, Wang, L*. (2016) COI1-regulated hydroxylation of jasmonoyl-L-isoleucine impairs *Nicotiana attenuata*'s resistance to the generalist herbivore *Spodoptera litura*. **Journal of Agricultural and Food Chemistry** 64, 2822-2831
http://www.ncbi.nlm.nih.gov/pubmed/26985773
39. Qi, J.#, Sun, G.#, Wang, L.#, Zhao, C.#, Hettenhausen, C., Schuman, M.C., Baldwin, I.T., Li, J., Song, J., Liu, Z., Xu, G., Lu, X., **Wu, J.*** (2016) Oral secretions from *Mythimna separata* insects specifically induce defense responses in maize as revealed by high-dimensional biological data. **Plant Cell & Environment** 39, 1749-1766
http://www.ncbi.nlm.nih.gov/pubmed/26991784
40. Hettenhausen, C#., Sun, G.#, He, Y., Zhuang, H., Sun, T., Qi, J., **Wu, J.*** (2016) Genome-wide identification of calcium-dependent protein kinases in soybean and analyses of their transcriptional responses to insect herbivory and drought stress. **Scientific Reports**, 6: 18973.

http://www.ncbi.nlm.nih.gov/pubmed/26733237

2015

41. Hettenhausen, C., Schuman, M.C., **Wu, J.*** (2015) MAPK signaling – a key element in plant defense response to insects. **Insect Science 22,** 157-164**.** http://www.ncbi.nlm.nih.gov/pubmed/24753304
42. Li, J., Hettenhausen, C., Sun, G., Zhuang, H., Li, J. H.*, **Wu, J.*** (2015) The parasitic plant *Cuscuta australis* is highly insensitive to abscisic acid-induced suppression of hypocotyl elongation and seed germination. **PLoS One**, 10: e0135197. http://www.ncbi.nlm.nih.gov/pubmed/26258814

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其它文章

1. Su, Z., Li, H., Xu, Y., Zhang, C., **Wu, J.**, Lei, Y. (2024) Establishment of an efficient Agrobacterium tumefaciens-mediated transformation system for an Armillaria species, a host of the fully mycoheterotrophic plant *Gastrodia elata*. **Folia Microbiologica**
2. Sun, T., Xu, Y., Zhang, D., Zhu xang, H., **Wu, J.**, Sun, G. (2016) An acyltransferase gene that putatively functions in anthocyanin modification was horizontally transferred from Fabaceae into the genus *Cuscuta*. **Plant Diversity 38**, 149-155.
3. Sun, H., Wang, L., Zhang, B., Ma, J., Hettenhausen, C., Cao, G., Sun, G., **Wu, J.**, Wu, J*. (2014) Scopoletin is a phytoalexin against *Alternaria alternata* in wild tobacco dependent on jasmonate signalling. **Journal of Experimental Botany 65**, 4305-15. http://www.ncbi.nlm.nih.gov/pubmed/24821958
4. Zhang, N., Han Z., Sun, G., Hoffman, A., Wilson, I.W., Yang, Y., Gao, Q., **Wu, J**., Xie, D., Dai, J., Qiu, D. (2014) Molecular cloning and characterization of a cytochrome P450 taxoid 9alpha-hydroxylase in *Ginkgo biloba* cells. **Biochemical and Biophysical Research Communications 443**, 938-43. http://www.ncbi.nlm.nih.gov/pubmed/24380857
5. Sun, H., Hu, X., Ma, C., Hettenhausen, C., Wang, L., Sun, G., **Wu, J.**, Wu, J*. (2014) Requirement of ABA signalling-mediated stomatal closure for resistance of wild tobacco to *Alternaria alternate*. **Plant Pathology 63**, 1070-7. http://onlinelibrary.wiley.com/doi/10.1111/ppa.12181/abstract
6. Sun, G., Yang, Y., Xie, F., Wen, J.F., **Wu J.**, Wilson, I.W., Tang, Q., Liu, H., Qiu, D. (2013) Deep sequencing reveals transcriptome re-programming of *Taxus* × *media* cells to the elicitation with methyl jasmonate. **PLoS One 8**, e62865. http://www.plosone.org/article/info:doi/10.1371/journal.pone.0062865
7. Yu, S., Cao, L., Zhou, C.M., Zhang, T.Q., Lian, H., Sun, Y., **Wu, J.**, Wang, G., Wang, J.W., (2013) Sugar is an endogenous cue for juvenile-to-adult phase transition in plants. **eLife 2,** e00269. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3610343/
8. Deng, W.W., Zhang, M., **Wu J.**, Li, Y.Y., Wei, C.L.*, Jiang, C.J., Wan, X.C. (2013) Molecular cloning, functional analysis of three *cinnamyl alcohol dehydrogenase*

(*CAD*) genes in the leaves of tea plant, *Camellia sinensis*. **Journal of Plant Physiology 170,** 272-282
http://www.ncbi.nlm.nih.gov/pubmed/23228629

9. Meldau, S., **Wu, J.**, Baldwin, I.T.* (2009) Silencing two herbivory-activated MAP kinases, SIPK and WIPK, does not increase *Nicotiana attenuata*'s susceptibility to herbivores in the glasshouse and in nature. **New Phytologist 181**, 161-73.
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10. Rayapuram, C., **Wu, J.**, Hase, C., and Baldwin, I.T.* (2008) PR-13/Thionin not PR-1 mediates bacterial resistance in *Nicotiana attenuata* in nature and neither influences herbivore resistance. **Molecular Plant-Microbe Interactions 21,** 988-1000.
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http://www.ncbi.nlm.nih.gov/pubmed/16113221

论著章节

1. 《植物与昆虫的相互作用》2023 年，科学出版社，主编 娄永根、王琛柱，第六章“玉米对植食性昆虫的防御机制”，齐金峰、王蕾、李京、吴建强。
2. 《植物与生物相互作用总论》2023 年，科学出版社，主编 方荣祥，第八章，“植物与植物相互作用”，吴建强、齐金峰、王蕾、申国境。
3. Hettenhausen C, Baldwin, I.T., **Wu J.** (2014) Virus-induced gene silencing in plant MAPK research. **Methods in Molecular Biology – Plant MAP Kinases: Methods and Protocols. Eds. G. Komis, J. Samaj, Humana Press Inc. 1171:79-89**
http://www.ncbi.nlm.nih.gov/pubmed/24908121
4. Galis I., Schuman M.C., Gase K., Hettenhausen C., Hartl M., Dinh S.T., **Wu J.**, Bonaventure G., Baldwin I.T. (2013) The use of VIGS technology to study plant-herbivore interactions. **Methods in Molecular Biology - Virus-induced gene silencing: Methods and protocols. Eds. A. Becker, Humana Press Inc. 975:109-37**
http://www.ncbi.nlm.nih.gov/pubmed/23386299
5. Tretyakov, A., Mrotzek, G., **Wu, J.**, Baldwin, I.T., Saluz, H.P.* (2006). Rapid heatblock thermocycling of small samples: a path to fast, low-cost plant genotyping. **Floriculture, Ornamental and Plant Biotechnology. Vol. 4. Global Science Books, Isleworth, 226 - 230.**

口头报告

1. **17th World Congress on Parasitic Plants (WCPP2024) meeting**, Nara, Japan, June 3-7, 2024.
2. **首届植物科学前沿学术大会**，2022 年 7 月 18-21 日，南京
3. **第六届植物生物互作国际会议**，2021 10.9-2021.10.11，线上
4. **全国植物保护博士后论坛暨第十五届全国青年植保科技创新学术研讨会**，2021.7.29-2021.8.01，呼和浩特
5. **Topic workshop of 43rd annual meeting of the molecular biology society of Japan**，2020 年 12 月 2 日（Zoom meeting）

6. **全国系统与进化植物学研讨会暨第十四届青年学术研讨会**，2020 年 11 月 25-28 日，西双版纳热带植物园
7. **云南省植物学会第 13 次会员代表大会暨植物多样性与绿色发展学术研讨会**，2020 年 11 月 12-14 日，昆明
8. **JIPB 编委会暨整合植物生物学研讨会**，2020 年 11 月 18-20 日，广州
9. **第十八届生态学大会**，云南省昆明市，2019 年 11 月 28 日-12 月 1 日
10. **The 10th Conference of Asia-Pacific Association of Chemical Ecologist**, Hangzhou, China, October 9-13, 2019
11. **World Congress on Parasitic Plants - WCPP2019**, Amsterdam, the Netherlands, June 30-July 5, 2019
12. **第十二届全国化学生态学学术会议**，福建福州市，2018 年 6 月 22-25 日
13. **第九届西北地区植物科学与资源利用研讨会**，云南大理，2017 年 8 月 25-27 日
14. **The 5th International Conference on Biotic Plant Interactions**, Aug. 17-21, 2017
15. **第十三届全国杂草科学大会**，贵阳，2017 年 8 月 7 日-10 日
16. **17th Plant Genomics Conference in China**, Fuzhou, China, Aug. 19-21, 2016
17. **11th National Congress of Chemical Ecology**, Wuhan, China, July 22-24, 2016
18. **National Congress of Plant Biology**, Changchun, China, Oct. 9-12, 2015
19. **International Symposium on "From Ecosystems to Modern Agriculture"**, Lanzhou, China, June 26 - 27, 2015
20. **13th Congress on Parasitic Plants**, Kunming, China, 5-10 July 2015
21. **3rd International Conference on Plant Metabolism**, Xiamen, China, July 2-5, 2014
22. **10th Solanaceae Conference (SOL 2013)**, Beijing, China, Oct. 13-17, 2013
23. The important roles of MAPKs in plant defense against herbivores. **Invited talk, Institute of Zoology, Chinese Academy of Sciences**, Beijing, China, Jun 4, 2013
24. Herbivory-induced signaling in plants – MAPKs go ahead. **Invited talk, Institute of Botany, Chinese Academy of Sciences**, Beijing, China, Nov. 12, 2012
25. Herbivory-induced signaling in plants – MAPKs go ahead. Invited talk, **Institute of Genetics and Developmental Biology, Chinese Academy of Sciences**, Beijing, China, Nov. 14, 2012
26. MPK4 in stress signaling. **Invited talk, Huazhong Agricultural University**, Wuhan, China, Jul. 18, 2012
27. Functions of MAPK signaling in plant resistance to herbivores. **Invited lecture, Chinese Academy of Forestry**, Beijing, China, Dec. 27, 2011
28. MPK4 in *Nicotiana attenuata*: a multifaceted MAPK involved in biotic and abiotic resistance. **2nd International Symposium on Integrative Plant Biology**, **Invited lecture,** Lanzhou, China, Aug. 26-28, 2011
29. Herbivory-Induced Signaling in Plants: Perception and Action. **Invited lecture, Anhui Agricultural University**, Feb 21, 2011
30. When an herbivore takes a bite, does the plant know? **Invited plenary lecture, International Conference on Plant Vascular Biology and Agriculture,** Chongqing, China, June 21-24, 2009
31. NaCDPK1 mediates heat resistance in *Nicotiana attenuata*. **Max Planck Institute for Chemical Ecology,** Jena, Germany, Sept. 25-26, 2008
32. MAP kinases regulate *Nicotiana attenuata's* defense responses to herbivory. Department of Life Sciences, **Nanjing University,** Nanjing, China, June 6, 2008

33. Genetic modifications of *Nicotiana attenuata* reveal functions of plant secondary metabolites in resistance to herbivory; **Invited plenary lecture, International Conference on Plant Secondary Metabolism,** Kunming, China, June 8-10, 2008
34. MAP kinases regulate defense responses to herbivory in *Nicotiana attenuata*; **Max Planck Institute for Chemical Ecology,** Jena, Germany, Sept. 2007
35. The evolution of proteinase inhibitor defense mechanisms during polyploidy speciation in *Nicotiana* native to North America, **Workshop DFG-SPP 1152 "Evolution of metabolic diversity",** Halle, Germany, Oct. 2004
36. The evolution of herbivory-specific expression of proteinase inhibitors during polyploidy speciation in *Nicotiana* native to North America; **Botanikertagung 2004/Deutsche Botanische Gesellschaft, Vereinigung für Angewandte Botanik, Braunschweig,** Germany, Sept. 2004

教学工作

1. "植物分子生物学"，中科院昆明植物研究所，2019.06
2. "植物分子生物学"，中科院昆明植物研究所，2017.04
3. "植物分子生物学"，中科院昆明植物研究所，2014.12
4. "植物分子生物学"，中科院昆明植物研究所，2013.06
5. "Transfection of Arabidopsis Protoplasts", Max Planck International Research School, basic lecture, Max Planck Institute for Chemical Ecology, Jena, Feb. 6-8, 2012
6. "Advanced Molecular Cloning and Application of Arabidopsis Protoplasts", Max Planck International Research School, basic lecture, Max Planck Institute for Chemical Ecology, Jena, November 7-11, 2011
7. "Application of quantitative real-time PCR in ecological studies", Ecology Workshop, Friedrich Schiller University, Jena, July, 2010
8. "Basic Knowledge of Molecular Cloning", Max Planck International Research School, basic lecture, Max Planck Institute for Chemical Ecology, Jena, June, 2009
9. "Molecular Cloning of PCR Products", Ecology Workshop, Friedrich Schiller University, Jena, July, 2008

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26.李娟（2013.01-2016.01），华中农业大学（联合培养）
27. Dahai Yang (2007.04-2011.03), Functions of protein kinases, calcium-dependent protein kinases (CDPKs) and BRI1-associated kinase 1 (BAK1), in wild tobacco (*Nicotiana attenuata*) immunity to herbivore and pathogen. Max Planck Institute for Chemical Ecology.
28. Hendrik Wünsche (2008.07-2011.06), Involvement of two nitric oxide-associated genes, NOA1 and GSNOR, in *Nicotiana attenuata*'s resistance to the specialist insect herbivore *Manduca sexta*. Max Planck Institute for Chemical Ecology.
29. Christian Hettenhausen (2007.02-2011.12), Mitogen-activated protein kinase 4 (MPK4) functions in development and resistance to biotic and abiotic stresses in *Nicotiana attenuata*. Max Planck Institute for Chemical Ecology。
30. Stefan Meldau (2007.01-2012.03), Early herbivory-induced responses in plants.
31. Maria Heinrich (2009.01-2012.07), Functions of MAPKKs in plant resistance to herbivore in *Nicotiana attenuata*. Max Planck Institute for Chemical Ecology.

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5. 卞金鸽（2018.09-2021.06），中科院昆明植物研究所
6. 温佳昕（2016.09-2019.06），云南大学与中科院昆明植物研究所，联合培养
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