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教育经历:

武汉大学微生物专业毕业 (-1978)

工作经历:

现任中国科学院南京土壤研究所党委书记, 兼南京土壤所-香港浸会大学土壤与环境联合开放研究实验室主任, 中国土壤学会理事, 中国土壤学会土壤生物与生物化学专业委员会主任, 中国土壤质量标准化委员会主任, 中国菌根联合会副会长等。1993年起享受国务院政府特殊津贴。

长期从事土壤微生物研究, 研究领域包括土壤微生物多样性及其生态功能、微生物种质资源及其应用、陆地微生物生态过程和全球变化等, 主要研究方向包括土壤微生物对全球变化的响应及其机理、退化土壤恢复和污染土壤修复的微生物技术及机理、环境污染物生态毒性的生物学指标、粪源性生物污染的生态风险及其控制、有机废弃物资源化技术、水体微生物 净化与控制技术、珍稀药用食用真菌资源开发和人工种植技术、生物肥料与微生物功能有机肥等。

曾主持国家自然科学基金、国际IFS、863重点项目、973 课题等20多项国家和国际合作项目。已获省科技进步一等奖1次, 省科技进步三等奖3次, 发表论文100多篇 (SCI 40余篇), 出版专著4本、译著1本, 申请和授权发明专利16个。

科研项目[TOP](#)

课题名称	负责人	课题来源	起止时间
大气CO ₂ 浓度升高下作物秸秆降解过程及微生物学机理	林先贵	国家自然科学基金项目	2006-2008
设施渔业新型、高效水质净化设备组及配套及循环水工厂化养鱼效果中期试验	林先贵	国家科技部农业科技成果转化资金项目	2006-2009
造纸黑液有机肥生产技术集成与产业化	林先贵	国家科技支撑计划课题	2006-2010
河南封丘试区耕地保育与持续高效现代农业试点工程	林先贵	科学院知识创新工程重大项目	2007-2010
多环芳烃污染农田土壤的微生物修复技术与示范	林先贵	国家科技部863重点项目	2007-2011
大气对流层臭氧浓度升高下土壤微生物群落演替及功能变化	林先贵	国家自然科学基金项目	2008-2010
有机废弃物快速催腐与共发酵生产含活性物的功能有机肥	林先贵	广东省中国科学院全面战略合作项目	2010-2012
长期施有机肥潮土中芽孢杆菌的群落演替规律及其功能研究	林先贵	国家自然科学基金面上项目	2011-2013
土地利用与畜牧业的甲烷和氧化亚氮排放项目	林先贵	中国科学院战略性先导科技专项	2011-2015

著作论文[TOP](#)

1. Cui XC, Hu JL, Lin XG, Wang FY, Chen RR, Wang JH, Zhu JG. Arbuscular Mycorrhizal Fungi Alleviate Ozone Stress on Nitrogen Nutrition of Field Wheat. *Journal of Agricultural Science and Technology*, 2013, 15: 1043-1052
2. Hu JL, Wang HS, Wu FY, Wu SC, Cao ZH, Lin XG, Wong MH. Arbuscular mycorrhizal fungi influence the accumulation and partitioning of Cd and P in bashfulgrass (*Mimosa pudica* L.) grown on a moderately Cd-contaminated soil. *Applied Soil Ecology*, 2014, 73: 51-57
3. Hu JL, Wu SC, Wu FY, Leung H.M., Lin XG, Wong MH. Arbuscular mycorrhizal fungi enhance both absorption and stabilization of Cd by Alfred stonecrop (*Sedum alfredii* Hance) and perennial ryegrass (*Lolium perenne* L.) in a Cd-contaminated acidic soil. *Chemosphere*, 2013, <http://dx.doi.org/10.1016/j.chemosphere.2013.07.089>
4. Feng YZ, Cui XC, He SY, Dong G, Chen M, Wang JH, Lin XG. The role of metal nanoparticles in influencing arbuscular mycorrhizal fungi effects on plant growth. *Environ. Sci. Technol.*, 2013, DOI: 10.1021/es402109n
5. Xu JB, Feng YZ, Wang YM, Lin XG. Characteristics of purple non-sulfur bacteria grown under *Stevia* residue extractions. *Letters in Applied Microbiology*, 2013, doi: 10.1111/lam.12129
6. Zheng SX, Hu JL, Jiang XF, Ji FQ, Zhang JB, Yu ZN, Lin XG. Long-term manure-containing and P-deficiency fertilization induce opposite changes in microbial community in an arable sandy loam soil in North China revealed by fatty acids methyl esters (FAMES) analysis. *Pedobiologia*, 2013, <http://dx.doi.org/10.1016/j.pedobi.2013.05.001>
7. Wu J, Wang Y, Lin X (2013) Purple Phototrophic Bacterium Enhances Stevioside Yield by *Stevia rebaudiana* Bertoni via Foliar Spray and Rhizosphere Irrigation. *PLoS ONE* 8(6): e67644. doi:10.1371/journal.pone.0067644
8. Hu JL, Li JT, Wu FY, Wu SC, Ye ZH, Lin XG, Wong MH. Arbuscular mycorrhizal fungi induced differential Cd and P phytoavailability via intercropping of upland kangkong (*Ipomoea aquatica* Forsk.) with Alfred stonecrop (*Sedum alfredii* Hance): post-harvest study. *Environmental Science and Pollution Research*, 2013, DOI 10.1007/s11356-013-1903-7
9. Hu JL, Chan PT, Wu FY, Wu SC, Zhang JH, Lin XG, Wong MH. Arbuscular mycorrhizal fungi induce differential Cd and P acquisition by Alfred stonecrop (*Sedum alfredii* Hance) and upland kangkong (*Ipomoea aquatica* Forsk.) in an intercropping system. *Applied Soil Ecology*, 2013, 63: 29-35.
10. Zeng J, Lin XG, Zhang J, et al. Successive transformation of benzo[a]pyrene by laccase of *Trametes versicolor* and pyrene-degrading *Mycobacterium* strains. *Applied Microbiology Biotechnology*, 2013, 97: 3183-3194.
11. Shen CC, Xiong JB, Zhang HY, Feng YZ, Lin XG, Li XY, Liang WJ, Chu HY. Soil pH drives the spatial distribution of bacterial communities along elevation on Changbai Mountain. *Soil Biology & Biochemistry*, 2013, 57: 204-211.
12. Dai J, Hu JL, Lin XG, et al. Arbuscular mycorrhizal fungal diversity, external mycelium length, and glomalin-related soil protein content in response to long-term fertilizer management. *Journal of Soils and Sediments*, 2013, 13: 1-11.
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14. Lin XG, Feng YZ, Zhang HY, Chen RR, Wang JH, Zhang JB, Chu HY. Long-Term Balanced Fertilization Decreases Arbuscular Mycorrhizal Fungal Diversity in an Arable Soil in North China Revealed by 454 Pyrosequencing. *Environmental Science & Technology*, 2012, 46: 5764-5771
15. Feng YZ, Xu YP, Yu YC, Xie ZB, Lin XG. Mechanisms of biochar decreasing methane emission from Chinese paddy soils. *Soil Biology & Biochemistry*, 2012, 46: 80-88.
16. Li XZ, Wu YC, Lin XG, Zhang J, Zeng J. Dissipation of polycyclic aromatic hydrocarbons (PAHs) in soil microcosms amended with mushroom cultivation substrate. *Soil Biology & Biochemistry*, 2012, 47: 191-197
17. Feng YZ, Lin XG, Jia ZJ, Zhu JG. Identification of Formate-Metabolizing Bacteria in Paddy Soil by DNA-Based Stable Isotope Probing. *Soil Science Society of America Journal*, 2012, 76: 121-129
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 36. He S Y, Feng Y Z, Gu N, Zhang Y, Lin X G. The effect of γ -Fe2O3 nanoparticles on *Escherichia coli* genome. *Environmental Pollution*, 2011, 159: 3468-3473.
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- greenhouse soils continuously planted to watermelon in North China. *Mycorrhiza* (2011) 21:681–688
39. Zeng J, Lin X G, Zhang J, et al. Isolation of Polycyclic Aromatic Hydrocarbons (PAHs)-Degrading *Mycobacterium* spp. and the Degradation in Soil. *Journal of Hazardous Materials*, 2010, 183: 718-723
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 42. Shen W S, Lin X G, Shi W M, et al. Higher rates of nitrogen fertilization decrease soil enzyme activities, microbial functional diversity and nitrification capacity in a Chinese polytunnel greenhouse vegetable land. *Plant and Soil*, 2010, 337,1-2:137-150
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 45. Li X Z, Lin X G, Zhang J, et al. Degradation of polycyclic aromatic hydrocarbons by crude extracts from spent mushroom substrate and its possible mechanisms. *Current of Microbiology*, 2010, 60(5): 336-342
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 48. Hu J L, Lin X G, Wang J H, et al. Arbuscular Mycorrhizal Fungal Inoculation Enhances Suppression of Cucumber Fusarium Wilt in Greenhouse Soils. *Pedosphere*, 2010, 20(5): 586-593
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专利情况:

1. 廖继佩, 林先贵, 曹志洪. 一种植物根系分泌物连续收集装置. 实用新型专利, ZL02 2 64290.0. 授权公告日: 2003年10月22日
2. 廖继佩, 林先贵, 曹志洪. 一种植物根系分泌物连续收集方法及其装置. 发明专利, ZL02138258.1. 专利申请日: 2002年9月11日, 授权公告日: 2008年1月2日
3. 黄光国, 林先贵. 高含水轻质粉状物料干燥装置. 实用新型专利, ZL2004 2 0062158.3. 授权公告日: 2005年8月3日
4. 束中立, 林先贵, 吴锡军. 造纸废液生产有机肥的工艺. 发明专利, ZL 03 1 32087.2. 国际专利主分类号: C05F 7/02. 专利申请日: 2003年7月21日, 专利权人: 中国科学院南京土壤研究所, 授权公告日: 2005年11月9日
5. 黄光国, 林先贵, 董元华. 转筒式有机废弃物快速发酵装置. 实用新型专利, ZL2006 2 0072734.1. 授权公告日: 2007年4月11日
6. 徐定邦, 朱德芳, 林先贵, 徐文慧. 一种超低变性温度的聚合酶链式反应方法及其应用. 发明专利, ZL 02155183.9. 授权公告日: 2007年8月29日
7. 林先贵, 王一明, 束中立, 黄武建. 农业废弃物堆肥化三元微生物复合菌剂. 发明专利, ZL 2007 1 0190995.2. 授权公告日: 2010年7月14日
8. 林先贵, 胡君利, 张正高, 施维臣, 李晶. 一种仿野生灵芝覆土栽培方法. 发明专利, ZL 2009 1 0026870.5. 授权公告日: 2010年11月15日

专著情况:

1. 土壤微生物研究原理与方法, 高等教育出版社, 主编
2. 农业微生物研究与产业化进展, 科学出版社, 主编

获奖项目

TOP

- 1、1987年, 黄淮海平原中低产地区综合治理和综合发展的研究, 中科院特等奖;
- 2、1991年, 黄淮海平原农业综合发展配套技术和战略研究, 中科院一等奖;
- 3、1993年, 黄淮平原中低产地区综合治理和综合发展的研究, 国家科技进步特等奖;
- 4、1999年, 云南省科技进步三等奖;

- 5、2000年，中国科学院与省市、企业合作奖年度个人二等奖；
- 6、2001年，“九五”产学研联合先进个人奖；
- 7、2005年，江苏省科技进步一等奖；
- 8、2006年，江苏省“十五”技术进步先进工作者；
- 9、2006年，江苏省科技进步三等奖；
- 10、2006年，宿迁市科学技术进步奖一等奖；
- 11、2008年，安徽省自然科学、科技进步类三等奖；
- 12、2008年，宿迁市科技进步奖一等奖；
- 13、2010年，云南省科学技术奖



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