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科研项目

著作论文

获奖情况

课题组成员

个人经历

教育经历:

中国科学技术大学, 获理学学士学位 (1984-1989)

中国科学院南京土壤研究所, 获农学硕士学位 (1994-1997)

中国科学院南京土壤研究所, 获农学博士学位 (2001-2003)

工作经历:

中国科学院南京土壤研究所工作 (1989-)

中国科学院南京土壤研究所, 副研究员 (1994-2001, 2004-2005)

中国科学院南京土壤研究所, 研究员、博士生导师 (2005-)

日本国际农业科学研究中心、日本学术振兴会及日本科技厅特聘研究 (2003)

日本国际农业科学研究中心特聘研究员 (JIRCAS fellow, 2003-2004)

科研项目

课题名称	负责人	
水肥管理对稻田CH <sub>4</sub> 、N <sub>2</sub> O排放和CH <sub>4</sub> 氧化的影响	徐华	基
农业耕地的温室气体排放及其对策技术研究	徐华	
包膜和普通尿素施用稻田CH <sub>4</sub> 和N <sub>2</sub> O排放比较研究	徐华	
中国农田土壤固碳与温室气体减排潜力研究	徐华	院创
水肥管理对稻田CH <sub>4</sub> 产生氧化和排放的影响	徐华	国家
长江流域单季稻田温室气体排放监测与控制技术研究	徐华	农
稻田CH <sub>4</sub> 排放机理研究	徐华	

著作论文

专著:

1. 蔡祖聪, 徐华, 马静. 稻田生态系统CH<sub>4</sub>和N<sub>2</sub>O排放. 2009. 合

代表性学术论文:

1. Zhang GB, Liu G, Zhang Y, Ma J, Xu H\*, Kazuyuki Yagi. Fraction of CH<sub>4</sub> Oxidized in Paddy Fields: Seasonal Water Management in Winter Fallow Season. PLoS

2. Ji Y, Liu G, Ma J, Zhang GB, Xu H, K Yagi. Effect of mitigation of N<sub>2</sub>O emission from paddy field in South China: field observation. *Plant and Soil*, 2013, DOI 10.1007/s11101-013-0000-0
3. Zhang GB, Ji Y, Ma J, Liu G, Xu H, K Yagi. Pathway of oxidized, and <sup>13</sup>C isotope fractionation in a straw-incorporated paddy field. *Biogeosciences*, 2013, 10: 3375-3389
4. Zhang GB, Ji Y, Ma J, Xu H, Cai ZC, Yagi K. Intermittent production, oxidation, and emission of CH<sub>4</sub> in paddy field: a carbon isotope technique. *Soil Biology & Biochemistry*, 2013, 62: 100-107
5. Ji Y, Liu G, Ma J, Xu H, Yagi K. Effect of controlled irrigation on N<sub>2</sub>O emission from a winter wheat field. *Nutrient Cycling in Agroecosystems*, 2012, 94(1): 111-122
6. Zhang GB, Ji Y, Ma J, Liu G, Xu H, Yagi K. Pathway of oxidized, and <sup>13</sup>C isotope fractionation in a straw incorporated paddy field. *Biogeosciences Discuss.*, 2012, 9: 14175-14215
7. Zhang XY, Zhang GB, Ji Y, Ma J, Xu H, Cai ZC. Straw A Concentration and <sup>13</sup>C-Isotopic Signature of Dissolved Organic Carbon in Paddy Soil. *Pedosphere*, 2012, 22(1): 13-21
8. Zhu RB, Cheng QQ, Ding W, Xu H. Impact of seabird activity on methane fluxes from High Arctic tundra in Svalbard, Norway. *Research: Biogeosciences*, 2012, 117(G4)
9. Zhang GB, Zhang XY, Ji Y, Ma J, Xu H, Cai ZC. Carbon methanogenic pathway, and fraction of CH<sub>4</sub> oxidized in paddy soil. *Journal of Geophysical Research*, 2011, 116, G04001
10. Zhang G B, Zhang X Y, Ma J, Xu H\*, Cai Z C. Effect of straw incorporation on reduction of CH<sub>4</sub> production and emission from permanent rice paddy. *Nutrient Cycling in Agroecosystems*, 2011, 89(1): 1-10
11. Li X L, Yuan W P, Xu H\*, Cai Z C, Yagi K. Effect of tillage and aeration on CH<sub>4</sub> and N<sub>2</sub>O emissions from irrigated lowland rice paddy. *Nutrient Cycling in Agroecosystems*, 2011, 91(3): 238-246
12. Zhang G B, Ji Y, Ma J, Xu H\*, Cai Z C. Case study on rice straw incorporation in rice fields on production, methane during fallow and following rice seasons. *Australian Journal of Agricultural Research*, 2011, 49(3): 238-246
13. Li XL, Ziadi N, Bélanger G, Cai ZC, Xu H. Cadmium accumulation in rice grain affected by mineral N fertilizer and soil characteristics. *Plant and Soil*, 2011, 91(4), 521-531
14. Xu H, Hosen Y. Effects of soil water content and rice straw incorporation on CH<sub>4</sub> emissions during fallow and the following rice season. *Plant and Soil*, 2010, 335(1-2): 373-383
15. Ma E D, Zhang G B, Ma J, Xu H\*, Cai Z C, Yagi K. Effect of different straw management methods on N<sub>2</sub>O emission during wheat-growing season. *Nutrient Cycling in Agroecosystems*, 2010, 88(3): 463-469
16. Ma J, Ma E D, Xu H\*, Yagi K, Cai Z C. Wheat straw management affects CH<sub>4</sub> emissions from rice fields. *Soil Biology & Biochemistry*, 2010, 42: 100-107
17. Li X L, Zhang G B, Xu H\*, Cai Z C, Yagi K. Effect of hydroquinone and dicyandiamide on nitrous oxide emissions from a rice paddy field. *Chemosphere*, 2009, 75(10): 1417-1422
18. Li X L, Zhang X Y, Xu H\*, Cai Z C, Yagi K. Methane emission from rice paddy soil as influenced by timing of application of dicyandiamide. *Nutrient Cycling in Agroecosystems*, 2009, 85(1): 1-10
19. Ma J, Xu H\*, Yagi K, Cai Z C. Methane emission from paddy soil under different straw returning mode. *Plant and Soil*, 2008, 313(1-2): 1-10
20. Ma J, Yagi K, Xu H\*, Han Y, Cai Z C. Is burial of wheat straw reduce CH<sub>4</sub> emissions from rice cultivation? *Soil Science and Society of America Journal*, 2008, 54(4): 638-643
21. Ma J, Xu H\*, Han Y, Cai Z C, Yagi K. Short-term effect of straw incorporation into paddy field as affected by rice transplanting time. *Soil Research*, 2008, 46(3): 281-287

22. Ma J, Li X L, Xu H, Han Y, Cai Z C, Yagi K. Effects of straw application on CH<sub>4</sub> and N<sub>2</sub>O emissions from a paddy field. *Journal of Soil Research*, 2007, 45(5): 359-367
23. Xu H, Cai Z C, Tsuruta H. Soil moisture between rice-emission, production, and oxidation. *Soil Science Society of America Journal*, 2003, 67(4): 1147-1157
24. Xu H, Cai Z C, Jia Z J. Effect of soil water contents on CH<sub>4</sub> emission during the following rice-growing period. *Agroecosystems*, 2002, 64(1-2): 101-110
25. Xu H, Cai Z C, Jia Z J, Tsuruta H. Effect of land management on CH<sub>4</sub> emission during the following flooded and rice-growing period. *Agroecosystems*, 2000, 58(1-3): 327-332