



欧阳威

非点源污染模拟与控制、流域环境过程

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#### 教育经历：

2011年2月获 荷兰屯特大学 (University of Twente - ITC Faculty) 理学博士  
2008年6月获 北京师范大学环境学院 工学博士  
2005年6月获 北京师范大学环境学院 工学硕士  
2002年6月获 中国农业大学资源与环境学院 农学学士

#### 工作经历：

2012/09-至今：北京师范大学环境学院 副教授、博士生导师  
2011/09-至今：北京师范大学环境学院 副教授  
2008/07-2011/09：北京师范大学环境学院 讲师  
2012/11-2013/01：康奈尔大学 青骨计划访问学者  
2008/09-2008/10：德国基尔大学 访问研究

#### 研究领域：

水环境及非点源污染模拟  
水污染生态修复  
基于3S技术的流域环境管理，农业环境保护

#### 社会任职：

#### 获奖情况：

2012年教育部科技进步二等奖，典型水资源区农业面源污染机制及防控技术，排名第4；  
2011年教育部科技进步二等奖，梯级水坝的生态累积效应评价方法及应用，排名第7；  
2010年全国百优博士论文提名奖；  
2008年北京师范大学优秀毕业生（博士）；  
2007年北京师范大学‘求是’奖学金奖；  
2006年获北京师范大学京师校友奖；  
2005年北京师范大学优秀毕业生（硕士）

#### 参与研究:

1. 国家自然科学基金青年-面上连续项目, 规模化冻融农区水文特征及非点源污染效应研究, 2014-2017
2. 中高纬地区农田壤中流氮磷污染物输移机理研究(自然科学基金、主持)2010-2013
3. 河套灌区水沙环境下农田磷污染特征分析(教育部博士点基金、主持)
4. 长期不同农业开发模式下土壤属性变化时空特征分析(教育部留学回国人员科研启动基金、主持)
5. 东北规模集约化农区农业面源污染防治技术集成与示范(国家科技支撑项目 2012-2016)
6. 雨水水质特征分析及雨水利用设备试制(科技支撑项目内容、主持)
7. 跨界河流农业生态因子遥感反演关键技术研究(科技支撑项目内容、主持)
8. 三江平原农业活动胁迫下的区域生态环境过程及安全调控研究(基金重点项目)
9. 内蒙古农业灌区磷负荷输移机理研究(国家自然科学基金项目)
10. 黄河流域内蒙古农业灌区非点源污染机理研究(国家自然科学基金项目)
11. 黄河上游湖口至青铜峡河段水电规划陆生生态影响研究
12. 新疆塔里木盆地塔河油田7区奥陶系油藏开发建设工程竣工验收项目
13. 亚行技援“农村非点源污染控制与管理研究”项目(国家环境保护总局、亚洲开发银行)
14. 俄罗斯微生物制剂修复水体与土壤石油污染试验研究

#### 论文专著:

1. **Wei Ouyang\***, Yushu Shan, Fanghua Hao, Siyang Chen, Xiao Pu, MK Wang. The effect on soil nutrients resulting from land use transformations in a freeze-thaw agricultural ecosystem. **Soil & Tillage Research**, 2013, 132 (8) 30 - 38.
2. Xuchen Zhao, **Wei Ouyang\***, Fanghua Hao, Chunye Lin, Fangli Wang, Sheng Han, Xiaojun Geng. Properties Comparison of Biochars from Corn Straw with Different Pretreatment and Sorption Behaviour of Atrazine. **Bioresource Technology**. 2013, 147: 338 - 344.
3. **Wei Ouyang\***, Haobo Huang, Fanghua Hao, Bobo Guo. Synergistic impacts of land-use change and soil property variation on non-point source nitrogen pollution in a freeze-thaw area. **Journal of Hydrology**. 2013, 495(12): 126 - 134 .
4. **Wei Ouyang\***, Xinfeng Wei, Fanghua Hao. Long-term soil nutrient dynamics comparison under smallholding land and farmland policy in Northeast of China. **Science of the Total Environment**. 2013, 450 - 451(15):129 - 139.
5. **Wei Ouyang\***, Yiming Xu, Fanghua Hao, Xuelei Wang, Chunye Lin. Effect of long-term agricultural cultivation and land use conversion on soil nutrient contents in the Sanjiang Plain. **CATENA**. 2013, 1: 243-250.
6. Fanghua Hao, Siyan Chen, **Wei Ouyang\***. Temporal rainfall patterns with water partitioning impacts on maize yield in a freeze-thaw zone. **Journal of Hydrology**. 2013,

7. **Wei Ouyang**, Shasha Qi, Fanghua Hao, Xuelei Wang, Yushu Shan, Siyang Chen. Impact of crop patterns and cultivation on carbon sequestration and global warming potential in an agricultural freeze zone. **Ecological modeling**, 2013, 252(3): 228-237.
8. **Wei Ouyang**, Yushu Shan, Fanghua Hao, Xuying Shi. Accumulated impact assessment of river buffer zone after 30 years of dam disturbance in the Yellow River Basin. **Stochastic Environmental Research and Risk Assessment**. 2013, 27(5): 1069-1079.
9. **Wei Ouyang**, Fanghua Hao, Xinfeng Wei, Haobo Huang. Spatial and temporal trend of Chinese manure nutrient pollution and assimilation capacity of cropland and grassland. **Environmental Science and Pollution Research**. 2013, 20(7): 5036-5046.
10. Siyan Chen, **Wei Ouyang\***, Fanghua Hao. Combined impacts of freeze-thaw processes on paddy land and dry land in Northeast China. **Science of the Total Environment**. 2013, 456-457: 24-33.
11. **Wei Ouyang**, Bobo Guo, Fanghua Hao, Haobo Huang, Junqi Li, Yongwei Gong. Modeling urban storm rainfall runoff from diverse underlying surfaces and application for control design in Beijing. **Journal of Environmental Management**. 2012, 12(113): 467-473.
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13. **Wei Ouyang**, Haobo Huang, Fanghua Hao, Yushu Shan, Bobo Guo. Evaluating spatial interaction of soil property with non point source pollution at watershed scale: the phosphorus indicator in Northeast China. **Science of the Total Environment**. 2012, 432: 412-421.
14. **Wei Ouyang**, Xinfeng Wei, Fanghua Hao, Chunye Lin and Xuan Zhang. Sediment phosphorus adsorption and fractionation difference of irrigation and drainage canals in upper reach of Yellow River Basin. **Fresenius Environmental Bulletin**. 2012, 21(3): 627-633.
15. FangHua Hao, Xuan Zhang, **Wei Ouyang\***, Andrew K. Skidmore, A.G. Toxopeus. Vegetation NDVI Linked to Temperature and Precipitation in the Upper Catchments of Yellow River. **Environmental Modeling & Assessment**. 2012, 17(4):389-398.
16. Yushu Shan, Fanghua Hao, **Wei Ouyang**. Identification of sources of heavy metals in agricultural soils using multivariate analysis and GIS. **Journal of Soils and Sediments**. 2013, 13(4): 720-729.
17. Fanghua Hao, Xuchen Zhao, **Wei Ouyang\***. Molecular Structure of Corn-cob-Derived Biochars and the Mechanism of Atrazine Sorption. **Agronomy Journal**. 2013, 105(3): 773-782.
18. Yushu Shan, Fanghua Hao, **Wei Ouyang\***, Siyang Chen. Effect of thirty years intensive tillage on spatial variations of soil nitrogen and phosphorus in freeze-thaw area. **Fresenius Environmental Bulletin**. 2012, 21(11): 3542-3550.
19. Fanghua Hao, Xuehui Lai, **Wei Ouyang\***, Yiming Xu, Xinfeng Wei, Kaiyu Song. Effects of land use changes on the ecosystem service values of a reclamation farm in Northeast

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  31. **Wei Ouyang**, Fanghua Hao, et al.Regional non point source organic pollution modeling and critical area identification for watershed best environmental management. **Water, Air, & Soil Pollution**, 2008, 187(1-4): 251-261.
  32. Hongguang Cheng, **Wei Ouyang**, Fanghua Hao. The Non-point Source Pollution in Livestock-breeding Areas of the HeiheRiver basin in Yellow River. **Journal of Stochastic Environmental Research & Risk Assessment**, 2007, 21(3):213-221.

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35. W Yang, H Cheng, C Lin, **W Ouyang**. Phosphorus distribution in Chinese albic black soil affected by land use. **African Journal of Agricultural Research**, 2012, 7 (43), 5810-5818.
36. Fanghua Hao, Xuan Zhang, Xiao Wang, **Wei Ouyang**. Assessing the Relationship between Landscape Patterns and Nonpoint Source Pollution in the Danjiangkou Reservoir Basin in China. **Journal of the American Water Resources Association**. 2012, 17 (4):389-398 .
37. Wenjing Yang, Hongguang Cheng, Fanghua Hao, **Wei Ouyang**, Shaoqing Liu, Chunye Lin. The influence of land-use change on the forms of phosphorus in soil profiles from the Sanjiang Plain of China. **Geoderma**. 2012, 189-190: 207-214.
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45. 欧阳威, 郝芳华, 等. 天然气开发对区域水环境安全的影响研究——以川东平原德阳地区为例. *安全与环境学报*, 2007, 7(5): 72-75.
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## 专著

郝芳华, 欧阳威. 冻融区规模化农业开发生态环境效应. 北京: 科学出版社,

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郝芳华, 欧阳威等. 北方平原农业非点源污染研究. 北京: 科学出版社, 2010.ISBN:

9787030279088.

**Ouyang Wei.** Interaction between landscape and pollution along a dam cascade. University of Twente, Faculty of ITC. ISBN: 9789061643005.

## 专利

1. 欧阳威, 郝芳华, 宋凯宇, 王玮, 张璇. 一种城市暴雨径流的深度处理组合装置. 专利号: ZL.200910236635.0.

2. 欧阳威, 赵进勇, 孙东亚, 宋凯宇. 一种不同土壤深度土壤溶液自动采样器. 专利号: ZL 2010 010586547.6.

3. 郝芳华, 单玉书, 欧阳威, 宋凯宇, 张璇, 徐一鸣. 一种城市降雨径流自动采样器. 专利号: ZL 2010 1 0101367.4.

4. 郝芳华, 赵旭晨, 欧阳威, 宋凯宇. 一种河流沉积物柱状采样装置, 专利号: ZL 201110087077.3.

5. 郝芳华, 陈思扬, 欧阳威, 宋凯宇, 张璇, 徐一鸣. 土壤冻融过程中污染物迁移转化的模拟装置及方法. 专利号: ZL 2010 1 0101368.9.

## 会议论文

1. **Wei Ouyang**, Bixin Cheng, Fanghua Hao. Land Cover Mapping and Comparison Analysis after Dafangying Reservoir Construction in China by Multi-temporal Landsat Remote Sensing. Proceeding of the third International Symposium on Future Intelligent Earth Observation Satellites. Beijing, Science Press. 2007: 452~455.

2. **Ouyang, W.**, Hao, F., Song, K., Wei, X. LUCC and landscape pattern variation of Naoli River basin over three decades in Northeast of China. American Geophysical Union, Fall Meeting 2011, abstract #H41H-1165, San Francisco.

3. Wang Wei, **Ouyang Wei**, Hao Fanghua. Characteristics analysis of first flush effect on runoff pollutants from different urban underlying surface. Mechanic Automation and Control Engineering (MACE). 2010, Wuhan, 4721-4724.

4. Kaiyu Song, Jinyong Zhao, **Wei Ouyang**, Xuan Zhang, Fanghua Hao. LUCC and landscape pattern variation of wetlands in warm-rainy. Southern China over two decades. International Society for Environmental Information Sciences 2010 Annual Conference (ISEIS). Procedia Environmental Sciences 2 (2010) 1296 - 1306.

5. Kaiyu Song, Yuan Li, **Wei Ouyang\***, Hao Fanghua, Xinfeng Wei. Manure Nutrients of Pig Relative to the Capacity of Cropland to Assimilate Nutrients in China. *Procedia Environmental Sciences*, 2012, 13: 1846 – 1855 (EI).

6. *Shasha Qi, Fanghua Hao, Wei Ouyang\**, *Hongguang Cheng*. Characterizing landscape and soil erosion dynamics under pipeline interventions in Southwestern China. *Procedia Environmental Sciences*, 2012, 13: 1863-1871 (EI).

7. Yiming Xu, Yuan Li, **Wei Ouyang**, Fanghua Hao\*, Zhaoliang Ding, Dongli Wang. Impact of long term agricultural development on wetland landscape pattern in Sanjiang Plain. *Procedia Environmental Sciences*, 2012, 13: 922-1932 (EI).