

**CURRICULUM VITAE****PERSONAL INFORMATION:**Name:

Liang-Jun Zhu (朱良君)

Position:

Assistant Professor

Business Address:Room D411, 11A Datun Road, Chaoyang District, Beijing 100101, P.R. China  
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Languages:

Chinese, English

Websites:Homepage <https://zhulj.net>Github <https://github.com/crazyzlj>Academic pages [Google Scholar](#), [Publons](#), [ORCID](#), [ResearchGate](#)**RESEARCH INTERESTS:**

Watershed process modeling, spatial optimization of watershed management practice scenario, intelligent geocomputation

**EDUCATION:**

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| 2014–2019 | <b>Ph.D.</b> (GIS), University of Chinese Academy Sciences, Beijing, P.R.C.<br><b>Dissertation:</b> Method of optimizing spatial configuration of beneficial watershed management practices in a unit-boundary adaptive manner<br><b>Supervisors:</b> Professor <a href="#">A-Xing Zhu</a> and Professor <a href="#">Cheng-Zhi Qin</a> |
| 2011–2014 | <b>M.Sc.</b> (Physical Geography), Beijing Normal University, Beijing, P.R.C.<br><b>Thesis:</b> A laser scanner for surface roughness and rill morphology measurement based on linear structured light<br><b>Supervisor:</b> Professor <a href="#">Guang-Hui Zhang</a>   |
| 2007–2011 | <b>B.Sc.</b> (GIS), Northwest A&F University, Yangling, Shaanxi, P.R.C.  |

**PROFESSIONAL EMPLOYMENT:**

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| 07/2019 to date: | Assistant Professor, State Key Laboratory of Resources and Environmental Information System (LREIS), Institute of Geographic Sciences and Natural Resources Research (IGSNRR), Chinese Academy Sciences (CAS) |
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**AWARDS, HONORS, AND SCHOLARSHIPS:**

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| 2012–2013 | National scholarship for graduate students, Beijing Normal University     |
| 2007–2008 | National scholarship for undergraduate students, Northwest A&F University |

## PUBLICATIONS AND RESEARCH PAPERS:

As of **April 2021**, totally **12** peer-reviewed journal articles (including **5** SCI-indexed papers) as the first author and/or corresponding author, **9** peer-reviewed journal articles (including **3** SCI-indexed papers) as co-author have been published.

Journal Articles of first/co-first (#)/corresponding author (\*):

- [12] **Liang-Jun Zhu**, Cheng-Zhi Qin\*, and A-Xing Zhu. **2021**. Spatial optimization of watershed best management practice scenarios based on boundary-adaptive configuration units. *Progress in Physical Geography: Earth and Environment*, 45(2), 207–227. doi:10.1177/0309133320939002
- [11] **Liang-Jun Zhu**, Junzhi Liu\*, Cheng-Zhi Qin\*, and A-Xing Zhu. **2019**. A modular and parallelized watershed modeling framework. *Environmental Modelling & Software*, 122, 104526. doi:10.1016/j.envsoft.2019.104526
- [10] **Liang-Jun Zhu**, Cheng-Zhi Qin\*, A-Xing Zhu, Junzhi Liu, and Hui Wu. **2019**. Effects of different spatial configuration units for the spatial optimization of watershed best management practice scenarios. *Water*, 11(2), 262. doi:10.3390/w11020262
- [9] Cheng-Zhi Qin, Hui-Ran Gao, **Liang-Jun Zhu\***, A-Xing Zhu, Jun-Zhi Liu, and Hui Wu. **2018**. Spatial optimization of watershed best management practices based on slope position units. *Journal of Soil and Water Conservation*, 73(5):504–517. doi:10.2489/jswc.73.5.504
- [8] **Liang-Jun Zhu**, A-Xing Zhu, Cheng-Zhi Qin\*, and Jun-Zhi Liu. **2018**. Automatic approach for deriving fuzzy slope positions. *Geomorphology*, 304:173–183. doi:10.1016/j.geomorph.2017.12.024
- [7] Yaxing Shi, **Liangjun Zhu\***, Chengzhi Qin, Axing Zhu. Spatial optimization of watershed best management practices based on slope position-field units. *Journal of Geo-information Science (in Chinese with English abstract)*, 23(4):564–575. [史亚星, **朱良君\***, 秦承志, 朱阿兴. **2021**. 基于坡位-地块单元的流域最佳管理措施空间优化配置方法. 地球信息科学学报, 23(4):564–575.] doi:10.12082/dqxxkx.2021.200335
- [6] A-Xing Zhu, **Liang-Jun Zhu\***, Yaxing Shi, Cheng-Zhi Qin, and Junzhi Liu. **2019**. Integrated watershed modeling and scenario analysis: a new paradigm for integrated study of physical geography? *Progress in Geography (in Chinese with English abstract)*, 38(8):1111–1122. [朱阿兴, **朱良君\***, 史亚星, 秦承志, 刘军志. **2019**. 流域系统综合模拟与情景分析——自然地理综合研究的新范式? 地理科学进展, 38(8):1111–1122.] doi:10.18306/dlkxjz.2019.08.001
- [5] Lin Wang, **Liang-Jun Zhu\***, A-Xing Zhu, Jun-Zhi Liu, and Lin Shen. **2016**. Effect of spatial unit delineation on simulating non-point source pollution by SWAT model. *Journal of Shenyang Agricultural University (in Chinese with English abstract)*, 47(4):460–466. [王琳, **朱良君\***, 朱阿兴, 刘军志, 沈琳. **2016**. SWAT模型非点源污染模拟对空间单元划分的响应. 沈阳农业大学学报, 47(4):460–466.] doi:10.3969/j.issn.1000-1700.2016.04.012
- [4] **Liang-Jun Zhu**, Guang-Hui Zhang\*, Zhen-Wei Li, and Ren Geng. **2015**. A laser scanner system for rill morphology measurement based on linear structured light. *Mountain*

- Research (in Chinese with English abstract)*, 33(6):770–776. [朱良君, 张光辉\*, 李振炜, 耿韧. 2015. 一种基于线结构光技术的细沟形态测量系统. 山地学报, 33(6):770–776.] doi:10.16089/j.cnki.1008-2786.000093
- [3] **Liang-Jun Zhu** and Guang-Hui Zhang\*. 2013. Review of measurement and quantification of surface microtopography. *Science of Soil and Water Conservation (in Chinese with English abstract)*, 11(5):114–122. [朱良君, 张光辉\*. 2013. 地表微地形测量及定量化方法研究综述. 中国水土保持科学, 11(5):114–122.] doi:10.16843/j.sswc.2013.05.018
- [2] **Liang-Jun Zhu**, Guang-Hui Zhang\*, Guo-Fang Hu, and Bing Wang. 2013. Study on evaluating ultrasonic measurement system of overland flow depth. *Journal of Soil and Water Conservation (in Chinese with English abstract)*, 27(1):235–239. [朱良君, 张光辉\*, 胡国芳, 王兵. 2013. 坡面流超声波水深测量系统研究. 水土保持学报, 27(1):235–239.] doi:10.13870/j.cnki.stbcb.2013.01.044
- [1] **Liang-Jun Zhu**, Guang-Hui Zhang\*, and Zong-Ping Ren. 2012. Comparing four methods for soil infiltration measurement. *Bulletin of Soil and Water Conservation (in Chinese with English abstract)*, 32(6):163–167. [朱良君, 张光辉\*, 任宗萍. 2012. 4种土壤入渗测定方法的比较. 水土保持通报, 32(6):163–167.] doi:10.13961/j.cnki.stbctb.2012.06.050
- Journal Articles of co-author:
- [9] Hui-Ran Gao, Cheng-Zhi Qin\*, **Liang-Jun Zhu**, A-Xing Zhu, Jun-Zhi Liu, and Hui Wu. 2018. Using slope positions as spatial units for optimizing spatial configuration of watershed management practices. *Journal of Geo-information Science (in Chinese with English abstract)*, 20(6):781–790. [高会然, 秦承志\*, 朱良君, 朱阿兴, 刘军志, 吴辉. 2018. 以坡位为空间配置单元的流域管理措施情景优化方法. 地球信息科学学报, 20(6):781–790.] doi:10.12082/dqxxkx.2018.170622
- [8] Lun-Jiang Wang, Guang-Hui Zhang\*, **Liang-Jun Zhu**, and Hao Wang. 2017. Biocrust wetting induced change in soil surface roughness as influenced by biocrust type, coverage and wetting patterns. *Geoderma*, 306:1–9. doi:10.1016/j.geoderma.2017.06.032
- [7] Hui-Ran Gao, Lin Shen, Jun-Zhi Liu\*, A-Xing Zhu, Cheng-Zhi Qin, and **Liang-Jun Zhu**. 2017. Review on the simulation of non-point source pollution in the Hilly region of Southern China. *Journal of Geo-information Science (in Chinese with English abstract)*, 19(8):1080–1088. [高会然, 沈琳, 刘军志\*, 朱阿兴, 秦承志, 朱良君. 2017. 中国南方丘陵区非点源污染过程模拟研究进展. 地球信息科学学报, 19(8):1080–1088.] doi:10.3724/SP.J.1047.2017.01080
- [6] Jing-Chao Jiang, Jie Yu, Cheng-Zhi Qin, Jun-Zhi Liu\*, Run-Kui Li, **Liang-Jun Zhu**, and A-Xing Zhu. 2017. A knowledge-driven method for intelligent setting of parameters in hydrological modeling. *Geomatics and Information Sciences of Wuhan University (in Chinese with English abstract)*, 42(4):525–530. [江净超, 余洁, 秦承志, 刘军志\*, 李

- 润奎, **朱良君**, 朱阿兴. 2017. 知识驱动下的水文模型参数智能化设置方法. 武汉大学学报·信息科学版, 42(4):525-530.] doi:10.13203/j.whugis20150044
- [5] Zong-Ping Ren\*, **Liang-Jun Zhu**, Bing Wang, and Sheng-Dong Cheng. 2016. Soil hydraulic conductivity as affected by vegetation restoration age on the Loess Plateau. *Journal of Arid Land*, 8(4):546-555. doi:10.1007/s40333-016-0010-2
- [4] Jun-Zhi Liu, A-Xing Zhu\*, Cheng-Zhi Qin, Jing-Chao Jiang, **Liang-Jun Zhu**, and Lin Shen. 2015. Parallel computing of watershed process simulation guided by geographical laws. *Journal of Geo-information Science (in Chinese with English abstract)*, 17(5):506-514. [刘军志, 朱阿兴\*, 秦承志, 江净超, **朱良君**, 沈琳. 2015. 论地理规律对流域过程模拟并行计算的指导作用. 地球信息科学学报, 17(5):506-514.] doi:10.3724/SP.J.1047.2015.00506
- [3] Guo-Fang Hu, Guang-Hui Zhang\*, and **Liang-Jun Zhu**. 2015. Comparison of three methods to measure depth of overland flow. *Bulletin of Soil and Water Conservation (in Chinese with English abstract)*, 35(3):152-156. [胡国芳, 张光辉\*, **朱良君**. 2015. 3种坡面流水深测量方法比较. 水土保持通报, 35(3):152-156.] doi:10.13961/j.cnki.stbctb.2015.03.034
- [2] Ren Geng, Guang-Hui Zhang\*, Zhen-Wei Li, Guo-Fang Hu, Hao Wang, and **Liang-Jun Zhu**. 2014. Variation of physical properties and soil organic matter based on the method of stratified sampling. *Journal of Soil and Water Conservation (in Chinese with English abstract)*, 28(6):194-199+205. [耿韧, 张光辉\*, 李振炜, 胡国芳, 王浩, **朱良君**. 2014. 基于分层抽样法的小流域土壤物理性质和有机质差异特征. 水土保持学报, 28(6):194-199+205.] doi:10.13870/j.cnki.stbcxb.2014.06.036
- [1] Bing Wang, Guang-Hui Zhang\*, Yang-Yang Shi, Xun-Chang Zhang, Zong-Pin Ren, and **Liang-Jun Zhu**. 2013. Effect of natural restoration time of abandoned farmland on soil detachment by overland flow in the Loess Plateau of China. *Earth Surface Processes and Landforms*, 38(14):1725-1734. doi:10.1002/esp.3459

#### Book chapters and entries:

- [1] Qin C-Z, **Zhu L-J**. 2020. GDAL/OGR and Geospatial Data IO Libraries. The Geographic Information Science & Technology Body of Knowledge (4th Quarter 2020 Edition), John P. Wilson (Ed.). doi:10.22224/gistbok/2020.4.1

#### **RESEARCH ACTIVITIES**

##### As Principal Investigator (PI) or Co-PI in research projects:

- [1] NONE.

##### Participating in research projects:

- [5] "Slope position as spatial unit for optimizing scenarios of Beneficial Watershed Management Practices (BMPs) in a unit-boundary adaptive manner", National Natural Science Foundation of China (No. 41871362), 2019-2022, PI: Cheng-Zhi Qin

- [4] "Scenario analysis of organic waste management in Dianbuhe watershed", National Key Technology Innovation Project for Water Pollution Control and Remediation (No. 2013ZX07103006-005), 2013–2016, PI: A-Xing Zhu
- [3] "Development of parallel algorithm for spatial statistics and geographical process simulation", National High-Tech Research and Development Program of China (No. 2011AA120305), 2011–2013, PI: A-Xing Zhu
- [2] "Hundred Talents Program" of the Chinese Academy of Sciences, 2012–2014, PI: Guang-Hui Zhang
- [1] "Research on experimental techniques of soil erosion", Independent research project of State Key Laboratory of Earth Surface Processes and Resource Ecology (No. 2012-ZY-02), 2012–2013, PI: Guang-Hui Zhang

Conference Oral Presentations:

- [4] New optimization framework of watershed best management practice scenarios in a unit-boundary adaptive manner. *10th iEMSs Conference* (Online), Sep. 14–18, 2020. Brussels.
- [3] Development of a modular and parallelized watershed modeling framework. *1st Regional Conference on Environmental Modeling and Software (Asian Region)*, May. 18–20, **2019**. Nanjing, China.
- [2] An automatic approach of prototype-based fuzzy slope positions. *AAG Annual Meeting*, Apr. 5–9, **2017**. Boston, USA.
- [1] Automatic approach for deriving fuzzy slope positions. *33rd International Geographical Congress (IGC)*, Aug. 21–25, **2016**. Beijing, China.