

Personal Information

Name: Guangshuai Cui

Gender: Male

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Education Background

- **06/2021 ~ 08/2022** Estación Experimental de Zonas Áridas, Consejo Superior de Investigaciones Científicas (EEZA-CSIC), Almería, Spain, **Visiting student**
- **09/2015 ~ 06/2022** Institute of Tibetan Plateau Research, Chinese Academy of Sciences (ITPCAS), Beijing, China, **PhD in Ecology**
- **09/2011 ~ 06/2015** Yunnan University, Kunming, China, **Bachelor in Ecology**

Work experience

- **09/2022 ~ Present** Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China, **Postdoc Researcher**

Research Interests

My research interest is in plant functional traits, including trade-offs of leaf functional traits, intraspecific and interspecific trait variation, plant-environment interactions and their consequences for vegetation dynamics in drylands. Besides, I have also researched the plant-plant interactions (i.e., competition and facilitation) and its effect on plant richness in resources-limited environments.

Publications

- 1) Pengfei Ma, Haoze Zhang, Haijuan Wei, **Guangshuai Cui***, Liu Yang, Haixia Wei, Ying Guo, Xinru Zhang, Francisco I. Pugnaire, Lin Zhang*. 2026. Increased precipitation promotes aboveground biomass primarily by extending the growing season rather than by affecting leaf traits in alpine desert grasslands. *Plant Soil*. Accepted.
- 2) **Guangshuai Cui**, Lin Zhang*, Liu Yang, Ying Guo, Jian Sun, Tianxiang Luo, Francisco I. Pugnaire, Eryuan Liang*. 2026. Aridity threshold triggers abrupt increase in shrub biomass through changes in leaf functional traits. *Ecosystems*.29: 16.
- 3) **Guangshuai Cui**, Lin Zhang*, Liu Yang, Lamu A, Zexi Ren, Rita Ale, Pengfei Ma, Jian Sun, Eryuan Liang, Francisco I. Pugnaire. 2025. *Caragana versicolor* shrub expansion is enhanced by moderate warming but later constrained by climate extremes in the southwestern Tibetan Plateau. *Global Ecology and Conservation*, 59:e03566.
- 4) **Guangshuai Cui**[#], Yuxi Wang[#], Francisco I Pugnaire, Lin Zhang*. 2025. Non-linear responses of plants enhance their resistance to drought in drylands. *The Innovation Geoscience*. 3:100136.
- 5) **Guangshuai Cui**, Francisco I. Pugnaire, Liu Yang, Wanglin Zhao, Rita Ale, Wei Shen, Tianxiang Luo, Eryuan Liang, Lin Zhang*. 2023. Shrub-mediated effects on soil nitrogen determines shrub-

herbaceous interactions in drylands of the Tibetan Plateau, *Frontiers in Plant Science*, 14:1137365.

- 6) **Guangshuai Cui**, Lin Zhang*, Wei Shen, Ying Guo, Eryuan Liang. 2021. Intensity, frequency and rate of insect herbivory for an alpine *Rhododendron* shrub: elevational patterns and leaf-age effects, *Alpine Botany*, 132: 233-243.
- 7) Xinru Zhang, **Guangshuai Cui**, Zhenjun Zuo, Wei Shen, Xinsheng Liu, Zhong Wang, Lin Zhang*. 2025. Phylogeny, Functional Types, and Environment Drive Different Leaf C:N:P Stoichiometric Patterns of Alpine Shrubs in Xizang, China. *Journal of Geophysical Research: Biogeosciences*, 130, e2025JG009102.
- 8) Ying Guo, Lin Zhang*, Wei Shen, **Guangshuai Cui**, Yanhong Tang, Tianxiang Luo. 2025. Nitrogen and carbon supply controls tree radial growth at an alpine treeline. *Journal of Plant Ecology*, rtaf177.
- 9) Liu Yang, Lin Zhang, **Guangshuai Cui**, Wanglin Zhao, Zhiming Zhang, Tianxiang Luo, Lin Zhang*. 2023. Sensitivity of radial growth of subalpine conifer trees to climate warming on the southeastern Tibetan Plateau. *Global Ecology and Conservation*, 43: e02470.
- 10) Chenxi Xia, Wanglin Zhao, Jinniu Wang, Jian Sun, **Guangshuai Cui**, Lin Zhang*. 2023. Progress on Geographical Distribution, Driving Factors and Ecological Functions of *Nepalese Alder*. *Diversity*, 15:59.
- 11) Rita Alel, Lin Zhang, Bhakta Bahadur Raskoti, **Guangshuai Cui**, Francisco I. Pugnaire, Tianxiang Luo*. 2023. Leaf carbon isotope tracks the facilitation pattern of legume shrubs shaped by water availability and species replacement along a large elevation gradient in Trans-Himalayas. *Annals of Botany*, 132:429-442.
- 12) Lin Zhang, Liu Yang, Ying Guo, Wei Shen, **Guangshuai Cui**. 2023. Leaf Longevity in a Timberline Tree Species *Juniperus saltuaria* in the Sergymla Mountains, Southeastern Tibet. *Journal of Resources and Ecology*, 13:34-40.
- 13) Lin Zhang*, **Guangshuai Cui**, Wei Shen, Xinsheng Liu. 2016. Cover as a simple predictor of biomass for two shrubs in Tibet. *Ecological Indicators*, 64:266-271.

Ongoing Projects

- 1) **Project**: “Conservation and ecological applications of shrub resources in the middle reaches of the Yarlung Tsangpo River”, 12/2025 ~ 11/2028. **Funding Agency**: Department of Science and Technology of the Tibet Autonomous Region. **Project Director**
- 2) **Project**: “Facilitation and its belowground-mediated process of *Caragana versicolor* on understory herbaceous across Tibet”, 01/2024 ~ 12/2025. **Funding Agency**: China Postdoctoral Science Foundation. **Project Director**
- 3) **Project**: “National Key Research and Development Program of China: Mechanisms, impacts and regional linkages of abrupt changes in cold terrestrial ecosystems”. 12/2024 ~ 11/2029. **Funding Agency**: Ministry of Science and Technology of China. **Participant**