

Stanford



Yingjie Li

Social Science Research Scholar
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CONTACT INFORMATION

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Bio

ACADEMIC APPOINTMENTS

- Social Science Research Scholar, Stanford Woods Institute for the Environment

HONORS AND AWARDS

- Stanford Rising Environmental Leader, Stanford University (2025)
- NASA-MSU Professional Enhancement Award, NASA-MSU (2024)
- Stanford Data Science Spotlight Award, Stanford (2023)
- Dissertation Completion Fellowship, Michigan State University (2022)
- William W. and Evelyn M. Taylor Endowed Fellowship, Michigan State University (2021)
- Young Scientists Summer Program (YSSP) Fellowship, International Institute for Applied Systems Analysis (IIASA) (2021)
- KBS LTER Summer Research Fellowship, Kellogg Biological Station LTER (2019)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Postdoctoral Fellow, Stanford Impact Labs (SIL) (2025 - present)
- Affiliated Researcher, King Center on Global Development (2025 - present)
- Global Health Postdoctoral Affiliate, Center for Innovation in Global Health (CIGH) (2025 - present)

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=uVeP2xAAAAAJ&hl=en>

Publications

PUBLICATIONS

- **Acute mental health benefits of urban nature** *NATURE CITIES*
Li, Y., Mao, Y., Mandle, L., Rydstrom, A., Remme, R. P., Lan, X., Wu, T., Song, C., Lu, Y., Nadeau, K. C., Meyer-Lindenberg, A., Daily, G. C., Guerry, et al
2025; 2 (8)
- **Transboundary flows in the metacoupled Anthropocene: typology, methods, and governance for global sustainability** *ECOLOGY AND SOCIETY*
Li, Y., Jia, N., Yu, X., Manning, N., Lan, X., Liu, J.

2023; 28 (3)

- **SDGdetector: an R-based text mining tool for quantifying efforts toward Sustainable Development Goals** *Journal of Open Source Software*
Li, Y., Frans, V. F., Song, Y., Cai, M., Zhang, Y., Liu, J.
2023; 8 (84): 5124
- **Satellite prediction of coastal hypoxia in the northern Gulf of Mexico** *REMOTE SENSING OF ENVIRONMENT*
Li, Y., Robinson, S. V. J., Nguyen, L. H., Liu, J.
2023; 284
- **Synthesizing social and environmental sensing to monitor the impact of large-scale infrastructure development** *ENVIRONMENTAL SCIENCE & POLICY*
Li, Y., Zhang, Y., Tiffany, L., Chen, R., Meng, C., Liu, J.
2021; 124: 527-540
- **Assessing progress towards sustainable development over space and time (vol 577, pg 74, 2020)** *NATURE*
Xu, Z., Chau, S. N., Chen, X., Zhang, J., Li, Y., Dietz, T., Wang, J., Winkler, J. A., Fan, F., Huang, B., Li, S., Wu, S., Herzberger, et al
2021; 592 (7856): E28
- **Impacts of irrigated agriculture on food-energy-water-CO2 nexus across metacoupled systems** *NATURE COMMUNICATIONS*
Xu, Z., Chen, X., Liu, J., Zhang, Y., Chau, S., Bhattarai, N., Wang, Y., Li, Y., Connor, T., Li, Y.
2020; 11 (1): 5837
- **Spatially explicit quantification of the interactions among ecosystem services** *LANDSCAPE ECOLOGY*
Li, Y., Zhang, L., Qiu, J., Yan, J., Wan, L., Wang, P., Hu, N., Cheng, W., Fu, B.
2017; 32 (6): 1181-1199
- **Mapping the hotspots and coldspots of ecosystem services in conservation priority setting** *JOURNAL OF GEOGRAPHICAL SCIENCES*
Li Yingjie, Zhang Liwei, Yan Junping, Wang Pengtao, Hu Ningke, Cheng Wei, Fu Bojie
2017; 27 (6): 681-696
- **Mapping global floodplain development disparities highlights drivers behind intensifying flood losses.** *Science bulletin*
Lan, Z., Liu, W., Pablo Schmitt, R. J., Wu, C., Li, Y., Chen, D., Lin, P., Yu, K., Bai, X., Zheng, K., Wang, T., Wang, H., Qi, et al
2026
- **Linking ecological resilience and ecosystem services to inform spatial conservation planning** *COMMUNICATIONS EARTH & ENVIRONMENT*
Wang, Z., Fu, B., Wu, X., Wang, S., Zhang, J., Zhang, L., Jiao, L., Wang, H., Li, Y., Luo, Y.
2026; 7 (1)
- **Country-specific progress toward the Sustainable Development Goals: Past, present, and prospects.** *Proceedings of the National Academy of Sciences of the United States of America*
Xing, Q., Lu, L., Wang, L., Chen, F., Liu, J., Pradhan, P., Bryan, B. A., Moallemi, E. A., Gao, L., Schaubroeck, T., Carrasco, L. R., Banik, D., Xu, et al
2025; 122 (52): e2524299122
- **Remote sensing reveals the impact of photovoltaic plant deployment on vegetation dynamics and drought sensitivity in vegetation water deficit regions** *CATENA*
Xia, Z., Li, Y., Guo, S., Yuan, B., Jia, N., Pan, X., Chen, R., Guo, X., Du, P.
2025; 259
- **A longitudinal, population-based, record-linked natural experiment on the effects of extreme heat events on mental health in urban communities: a study protocol.** *BMJ open*
Chukwusa, E., Vivaldi, G., Baecker, L., Bowerman, E., Bridge, N., Davidson, N., de la Cruz, A., Gasparrini, A., Gibbons, J., Guerry, A., Hammoud, R., Li, Y., Lu, et al
2025; 15 (10): e099771
- **The impact of photovoltaic plants on dryland vegetation phenology revealed by time-series remote sensing images** *AGRICULTURAL AND FOREST METEOROLOGY*
Xia, Z., Li, Y., Guo, S., Bao, E., Yuan, B., Chen, R., Tang, P., Yang, C., Du, P.
2025; 367

- **Spatiotemporal dynamics of coastal dead zones in the Gulf of Mexico over 20 years using remote sensing.** *The Science of the total environment*
Li, Y., Xia, Z., Nguyen, L., Wan, H. Y., Wan, L., Wang, M., Jia, N., Matti, V. R., Li, Y., Seeley, M., Moran, E. F., Liu, J.
2025; 979: 179461
- **Linking smart cities and SDGs through descriptive analysis of US municipalities** *NATURE CITIES*
Cai, M., Decaminada, T., Li, Y., Durst, N. J., Kassens-Noor, E., Wilson, M.
2025; 2 (2)
- **Exploring the interdependencies of ecosystem services and social-ecological factors on the Loess Plateau through network analysis.** *The Science of the total environment*
Wang, Z., Fu, B., Wu, X., Wang, S., Li, Y., Zhang, L., Chen, N., Wu, X.
2025; 960: 178362
- **Assessment of forest disturbance and soil erosion in wind farm project using satellite observations** *RESOURCES CONSERVATION AND RECYCLING*
Xia, Z., Li, Y., Guo, S., Zhang, X., Pan, X., Fang, H., Chen, R., Du, P.
2025; 212
- **The Russia-Ukraine war reduced food production and exports with a disparate geographical impact worldwide** *COMMUNICATIONS EARTH & ENVIRONMENT*
Jia, N., Xia, Z., Li, Y., Yu, X., Wu, X., Li, Y., Su, R., Wang, M., Chen, R., Liu, J.
2024; 5 (1)
- **A Multi-System Coupling Coordination Assessment to Achieve the Integrated Objectives of Forest Conservation, Marine Governance, and Socioeconomic Development in the Bay Area: A Case Study in the Bay Area of the Fujian River Delta** *FORESTS*
Huang, Z., Li, Y., Chen, X., Yu, X., Shui, W.
2024; 15 (11)
- **Balancing photovoltaic development and cropland protection: Assessing agrivoltaic potential in China** *SUSTAINABLE PRODUCTION AND CONSUMPTION*
Xia, Z., Li, Y., Guo, S., Jia, N., Pan, X., Mu, H., Chen, R., Guo, M., Du, P.
2024; 50: 205-215
- **Prospects for global sustainable development through integrating the environmental impacts of economic activities.** *Nature communications*
Han, S., Li, C., Li, M., Lenzen, M., Chen, X., Zhang, Y., Li, M., Yin, T., Li, Y., Li, J., Liu, J., Li, Y.
2024; 15 (1): 8424
- **Floating solar power as an alternative to hydropower expansion along China's Yellow River** *RESOURCES CONSERVATION AND RECYCLING*
Chen, K., Jin, Y., Feng, Y., Song, W., Li, Y., Zhou, Y., Guo, X., Li, Y., Kou, X., Zhu, A., Chen, R.
2024; 207
- **Satellites Reveal Spatial Heterogeneity in Dryland Photovoltaic Plants' Effects on Vegetation Dynamics** *EARTHS FUTURE*
Xia, Z., Li, Y., Guo, S., Chen, R., Zhang, W., Guo, X., Zhang, X., Du, P.
2024; 12 (6)
- **Assessment of the coupling coordination relationship between the green financial system and the sustainable development system across China.** *Scientific reports*
Li, C., Bao, Y., Li, Y., Yue, M., Wu, L., Mao, Y., Yang, T.
2024; 14 (1): 11534
- **Intranational synergies and trade-offs reveal common and differentiated priorities of sustainable development goals in China.** *Nature communications*
Xing, Q., Wu, C., Chen, F., Liu, J., Pradhan, P., Bryan, B. A., Schaubroeck, T., Carrasco, L. R., Gonsamo, A., Li, Y., Chen, X., Deng, X., Albanese, et al
2024; 15 (1): 2251
- **Distinguishing Trajectories and Drivers of Vegetated Ecosystems in China's Loess Plateau** *EARTHS FUTURE*
Wang, Z., Fu, B., Wu, X., Wang, S., Li, Y., Feng, Y., Zhang, L., Hu, Y., Cheng, L., Li, B.

2024; 12 (2)

- **Three main dimensions reflected by national SDG performance.** *Innovation (Cambridge (Mass.))*
Wu, X., Fu, B., Wang, S., Liu, Y., Yao, Y., Li, Y., Xu, Z., Liu, J.
2023; 4 (6): 100507
- **Mapping global water-surface photovoltaics with satellite images** *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*
Xia, Z., Li, Y., Guo, S., Chen, R., Zhang, W., Zhang, P., Du, P.
2023; 187
- **Vegetation resilience does not increase consistently with greening in China's Loess Plateau** *COMMUNICATIONS EARTH & ENVIRONMENT*
Wang, Z., Fu, B., Wu, X., Li, Y., Feng, Y., Wang, S., Wei, F., Zhang, L.
2023; 4 (1)
- **Escaping social-ecological traps through ecological restoration and socioeconomic development in China's Loess Plateau** *PEOPLE AND NATURE*
Wang, Z., Fu, B., Wu, X., Li, Y., Wang, S., Lu, N.
2023
- **Quantitatively distinguishing the impact of solar photovoltaics programs on vegetation in dryland using satellite imagery** *LAND DEGRADATION & DEVELOPMENT*
Xia, Z., Li, Y., Zhang, W., Guo, S., Zheng, L., Jia, N., Chen, R., Guo, X., Du, P.
2023
- **Global decadal assessment of life below water and on land.** *iScience*
Zhang, Y., Li, Y., Liu, J.
2023; 26 (4): 106420
- **Total Nitrogen and Total Phosphorus Pollution Reshaped the Relationship Between Water Supply and Demand in the Huaihe River Watershed, China** *CHINESE GEOGRAPHICAL SCIENCE*
Lu, Y., Liu, L., Qin, F., Wang, J., Liu, J., Li, Y., Wan, L.
2023
- **Broader applicability of the metacoupling framework than Tobler's first law of geography for global sustainability: A systematic review** *GEOGRAPHY AND SUSTAINABILITY*
Manning, N., Li, Y., Liu, J.
2023; 4 (1): 6-18
- **Urbanization does not endanger food security: Evidence from China's Loess Plateau.** *The Science of the total environment*
Li, S., Ji, Q., Liang, W., Fu, B., Lü, Y., Yan, J., Jin, Z., Wang, Z., Li, Y.
2023: 162053
- **Mapping 21st Century Global Coastal Land Reclamation** *EARTHS FUTURE*
Sengupta, D., Choi, Y., Tian, B., Brown, S., Meadows, M., Hackney, C. R., Banerjee, A., Li, Y., Chen, R., Zhou, Y.
2023; 11 (2)
- **Exploring the interaction between renewables and energy storage for zero-carbon electricity systems** *ENERGY*
Li, C., Chen, D., Li, Y., Li, F., Li, R., Wu, Q., Liu, X., Wei, J., He, S., Zhou, B., Allen, S.
2022; 261
- **Mapping the rapid development of photovoltaic power stations in northwestern China using remote sensing** *ENERGY REPORTS*
Xia, Z., Li, Y., Chen, R., Sengupta, D., Guo, X., Xiong, B., Niu, Y.
2022; 8: 4117-4127
- **Solar photovoltaic program helps turn deserts green in China: Evidence from satellite monitoring.** *Journal of environmental management*
Xia, Z., Li, Y., Zhang, W., Chen, R., Guo, S., Zhang, P., Du, P.
2022; 324: 116338
- **Ecosystem service assessments across cascade levels: typology and an evidence map** *ECOSYSTEM SERVICES*
Wang, Z., Fu, B., Zhang, L., Wu, X., Li, Y.
2022; 57

-
- **Unraveling human drivers behind complex interrelationships among sustainable development goals: a demonstration in a flagship protected area** *ECOLOGY AND SOCIETY*
Yang, H., Dietz, T., Li, Y., Dou, Y., Wang, Y., Huang, Q., Zhang, J., Songer, M., Liu, J.
2022; 27 (3)
 - **Bundling regions for promoting Sustainable Development Goals** *ENVIRONMENTAL RESEARCH LETTERS*
Wu, X., Liu, J., Fu, B., Wang, S., Wei, Y., Li, Y.
2022; 17 (4)
 - **Global impacts of future urban expansion on terrestrial vertebrate diversity** *NATURE COMMUNICATIONS*
Li, G., Fang, C., Li, Y., Wang, Z., Sun, S., He, S., Qi, W., Bao, C., Ma, H., Fan, Y., Feng, Y., Liu, X.
2022; 13 (1): 1628
 - **Decoupling of SDGs followed by re-coupling as sustainable development progresses** *NATURE SUSTAINABILITY*
Wu, X., Fu, B., Wang, S., Song, S., Li, Y., Xu, Z., Wei, Y., Liu, J.
2022; 5 (5): 452-459
 - **High-resolution mapping of water photovoltaic development in China through satellite imagery** *INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION*
Xia, Z., Li, Y., Guo, X., Chen, R.
2022; 107
 - **Global red and processed meat trade and non-communicable diseases** *BMJ GLOBAL HEALTH*
Chung, M., Li, Y., Liu, J.
2021; 6 (11)
 - **Integrating ecosystem service supply and demand into ecological risk assessment: a comprehensive framework and case study** *LANDSCAPE ECOLOGY*
Wang, Z., Zhang, L., Li, X., Li, Y., Fu, B.
2021; 36 (10): 2977-2995
 - **Ecosystem Services under Climate Change Impact Water Infrastructure in a Highly Forested Basin** *WATER*
Li, X., Zhang, L., J. O'Connor, P., Yan, J., Wang, B., Liu, D., Wang, P., Wang, Z., Wan, L., Li, Y.
2020; 12 (10)
 - **A network perspective for mapping freshwater service flows at the watershed scale** *ECOSYSTEM SERVICES*
Wang, Z., Zhang, L., Li, X., Li, Y., Frans, V. F., Yan, J.
2020; 45
 - **Impacts of international trade on global sustainable development** *NATURE SUSTAINABILITY*
Xu, Z., Li, Y., Chau, S. N., Dietz, T., Li, C., Wan, L., Zhang, J., Zhang, L., Li, Y., Chung, M., Liu, J.
2020; 3 (11): 964-971
 - **Assessing progress towards sustainable development over space and time** *NATURE*
Xu, Z., Chau, S. N., Chen, X., Zhang, J., Li, Y., Dietz, T., Wang, J., Winkler, J. A., Fan, F., Huang, B., Li, S., Wu, S., Herzberger, et al
2020; 577 (7788): 74-+
 - **The NPP-Based Composite Indicator for Assessing the Variations of Water Provision Services at the National Scale** *WATER*
Zheng, H., Zhang, L., Wang, P., Li, Y.
2019; 11 (8)
 - **Interactive national virtual water-energy nexus networks** *SCIENCE OF THE TOTAL ENVIRONMENT*
Xu, Z., Li, Y., Herzberger, A., Chen, X., Gong, M., Kapsar, K., Hovis, C., Whyte, J., Tang, Y., Li, Y., Liu, J.
2019; 673: 128-135
 - **Evolution of multiple global virtual material flows** *SCIENCE OF THE TOTAL ENVIRONMENT*
Xu, Z., Chau, S. N., Ruzzenenti, F., Connor, T., Li, Y., Tang, Y., Li, D., Gong, M., Liu, J.
2019; 658: 659-668
 - **Telecoupling Research: The First Five Years** *SUSTAINABILITY*

Kapsar, K. E., Hovis, C. L., Bicudo da Silva, R., Buchholtz, E. K., Carlson, A. K., Dou, Y., Du, Y., Furumo, P. R., Li, Y., Torres, A., Yang, D., Wan, H., Zaehring, et al
2019; 11 (4)

● **Toward Rigorous Telecoupling Causal Attribution: A Systematic Review and Typology** *SUSTAINABILITY*

Carlson, A. K., Zaehring, J. G., Garrett, R. D., Bicudo Silva, R., Furumo, P. R., Raya Rey, A. N., Torres, A., Chung, M., Li, Y., Liu, J.
2018; 10 (12)

● **Spatio-temporal variations of the flood mitigation service of ecosystem under different climate scenarios in the Upper Reaches of Hanjiang River Basin, China** *JOURNAL OF GEOGRAPHICAL SCIENCES*

Wang Pengtao, Zhang Liwei, Li Yingjie, Jiao Lei, Wang Hao, Yan Junping, Lu Yihe, Fu Bojie
2018; 28 (10): 1385-1398

● **A graded index for evaluating precipitation heterogeneity in China** *JOURNAL OF GEOGRAPHICAL SCIENCES*

Liu Yonglin, Yan Junping, Cen Minyi, Fang Qunsheng, Liu Zhengyao, Li Yingjie
2016; 26 (6): 673-693