

# 44 Prof. Xiaodong Song



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## Research Interests

structure and dynamics of Earth interior, the deep structure and regional structure in east Asia, and the earthquake disaster

## Major Publications

- Song, X., & Helmberger, D. V. (1997). Anisotropy of the earth's inner core. *Reviews of Geophysics*, 35(3), 297-313.
- Liang, C., Song, X., & Huang, J. (2004). Tomographic inversion of pn travel times in china. *Journal of Geophysical Research Solid Earth*, 109(B11), 285-296.
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- Zheng, S., Sun, X., Song, X., Yang, Y., & Ritzwoller, M. H. (2008). Surface wave tomography of china from ambient seismic noise correlation. *Geochemistry Geophysics Geosystems*, 9(5), 620-628.
- Zhang, J., Song, X., Li, Y., Richards, P. G., Sun, X., & Waldhauser, F. (2005). Inner core differential motion confirmed by earthquake waveform doublets. *Science*, 309(5739), 1357-60.
- Song, X., & Helmberger, D. V. (1995). A p wave velocity model of earth's core. *Journal of Geophysical Research Atmospheres*, 100(B6), 9817-9830.
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- Liang, C., & Song, X. (2006). A low velocity belt beneath northern and eastern tibetan plateau from pn tomography. *Geophysical Research Letters*, 33(22), 121-132.
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- Song, X. (1996). Anisotropy in central part of inner core. *Journal of Geophysical Research Atmospheres*, 101(B7), 16089-16097.
- Song, X. (2000). Joint inversion for inner core rotation, inner core anisotropy, and mantle heterogeneity. *Journal of Geophysical Research Solid Earth*, 105(B4), 7931-7943.

- Song, X., & Li, A. (2000). Support for differential inner core superrotation from earthquakes in alaska recorded at south pole station. *Journal of Geophysical Research Atmospheres*, 105(B1), 623–630.
- Sun, X., & Song, X. (2008). Tomographic inversion for three-dimensional anisotropy of earth's inner core. *Physics of the Earth & Planetary Interiors*, 167(1–2), 53-70.
- Xu, Z. J., & Song, X. (2009). Temporal changes of surface wave velocity associated with major sumatra earthquakes from ambient noise correlation. *Proceedings of the National Academy of Sciences of the United States of America*, 106(34), 14207-12.
- Xu, Z. J., & Song, X. (2010). Joint inversion for crustal and pn velocities and moho depth in eastern margin of the tibetan plateau. *Tectonophysics*, 491(1), 185-193.
- Bao, X., Song, X., Xu, M., Wang, L., Sun, X., & Mi, N., et al. (2013). Crust and upper mantle structure of the north china craton and the ne tibetan plateau and its tectonic implications. *Earth & Planetary Science Letters*, s 369–370(3), 129-137.
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