

# SHANG-PING XIE

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## PROFESSIONAL PREPARATION

B.Sc. 1984 Physical Oceanography, Ocean University of China, Qingdao, China  
Ph.D. 1991 Geophysics, Tohoku University, Sendai, Japan

## APPOINTMENTS

2012 – Professor, University of California San Diego  
1999-12 Professor (Associate Professor, 1999-02), University of Hawaii  
1994-99 Associate Professor, Hokkaido University, Japan  
1993-94 Research Associate, University of Washington  
1991-93 Visiting Scientist, Princeton University

## SYNERGESTIC ACTIVITIES

Co-chair, NCAR CESM Climate Variability and Change Working Group, 2013-  
Member, UCAR President's Advisory Committee on University Relations, 2016-  
Member, CLIVAR Climate Dynamics Panel, 2015-  
Panelist, NOAA five-year lab review of Geophysical Fluid Dynamics Laboratory, 2014  
Panelist, NOAA review of North American Multi-Model Ensemble Prediction Program, 2014  
Lead author, Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, 2010 – 2013  
Editor, *Journal of Climate*, 2006 – 2010  
Editor, *Advances in Atmospheric Sciences*, 2016 –  
Editor, *Science Bulletin*, 2018 –

## HONORS

Medal of the Meteorological Society of Japan (highest research honor of the Society), 2002  
Roger Revelle Chair in Environmental Science, UCSD, 2012 –  
National Science Foundation Special Creativity Award, 2013  
Highly Cited Researcher 2014, 2016, Thomson Reuters; 2017, 2018, Clarivate Analytics  
Fellow, American Geophysical Union, 2016  
Distinguished Lecture, Asia Oceania Geosciences Society, 2017  
Sverdrup Gold Medal and Fellow, American Meteorological Society, 2017

## CITATION STATISTICS based on the *Web of Science* Core Collection as of April 2019

Total	yearly 2018	h-index
18,263	2,589	75

## SELECTED PUBLICATIONS

Xie, S.-P., Q. Peng, Y. Kamae, X.T. Zheng, H. Tokinaga, and D. Wang, 2018: Eastern Pacific ITCZ dipole and ENSO diversity. *J. Climate*, 31, 4449-4462.  
Johnson, N.C., S.-P. Xie, Y. Kosaka, and X. Li, 2018: Increasing occurrence of cold and warm extremes during the recent global warming slowdown. *Nature Commun.*, 9, 1724, doi: 10.1038/s41467-018-04040-y.  
Tokinaga, H., S.-P. Xie, and H. Mukougawa, 2017: Early 20th century Arctic warming intensified by Pacific and Atlantic multidecadal variability. *PNAS*, 114, 6227-6232.

- Xie, S.-P., and Z.-Q. Zhou, 2017: Seasonal modulations of El Nino-related atmospheric variability: Indo-western Pacific ocean feedback. *J. Climate*, 30, 3461-3472.
- Li, G., S.-P. Xie, C. He, and Z. Chen, 2017: Western Pacific emergent constraint lowers projected increase in Indian summer monsoon rainfall. *Nature Clim. Change*, 7, 708-712.
- Liu, W., S.-P. Xie, Z. Liu, and J. Zhu, 2017: Overlooked possibility of a collapsed Atlantic Meridional Overturning Circulation in warming climate. *Science Advances*, 3, e1601666, doi:10.1126/sciadv.1601666.
- Kosaka, Y., and S.-P. Xie, 2016: The tropical Pacific as a key pacemaker of the variable rates of global warming. *Nature Geosci.*, 9, 669-673.
- Meehl, G.A., A. Hu, B.D. Santer, and S.-P. Xie, 2016: Interdecadal Pacific Oscillation contributions to twentieth-century global surface temperature trends. *Nature Clim. Change*, 6, 1005-1008.
- Li, X., S.-P. Xie, S. Gille, and C. Yoo, 2016: Atlantic induced pan-tropical climate change over the past three decades. *Nature Clim. Change*, 6, 275-279.
- Mei, W., and S.-P. Xie, 2016: Intensification of landfalling typhoons over the Northwest Pacific since the late 1970s. *Nature Geosci.*, 9, 753-757.
- Xie, S.-P., Y. Kosaka, and Y.M. Okumura, 2016: Distinct energy budgets for anthropogenic and natural changes during global warming hiatus. *Nature Geosci.*, 9, 29-33.
- Xu, L., P. Li, S.-P. Xie, Q. Liu, C. Liu, and W. Gao, 2016: Observing mesoscale eddy effects on mode water subduction and transport in the North Pacific. *Nature Commun.*, 7, 10505, doi: 10.1038/ncomms10505.
- Dai, A., J.C. Fyfe, S.-P. Xie, and X. Dai, 2015: Decadal modulation of global surface temperature by internal climate variability. *Nature Climate Change*, 5, 555-559.
- Mei, W., S.-P. Xie, F. Primeau, J. C. McWilliams, and C. Pasquero, 2015: Northwestern Pacific typhoon intensity controlled by changes in ocean temperatures, *Science Advances*, 1, e1500014, doi:10.1126/sciadv.1500014.
- Xie, S.-P., C. Deser, G.A. Vecchi et al., 2015: Towards predictive understanding of regional climate change. *Nature Clim. Change*, 5, 921-930.
- Zhou, Z.-Q., S.-P. Xie, X.-T. Zheng, Q. Liu, and H. Wang, 2014: Global warming-induced changes in El Nino teleconnections over the North Pacific and North America. *J. Climate*, 27, 9050-9064
- Kosaka, Y., and S.-P. Xie, 2013: Recent global-warming hiatus tied to equatorial Pacific surface cooling. *Nature*, 501, 403-407.
- Kosaka, Y., S.-P. Xie, N.-C. Lau, and G.A. Vecchi, 2013: Origin of seasonal predictability for summer climate over the Northwestern Pacific. *PNAS*, 110, 7574-7579.
- Huang, P., S.-P. Xie, K. Hu, G. Huang, and R. Huang, 2013: Patterns of the seasonal response of tropical rainfall to global warming. *Nature Geosci.*, 6, 357 – 361.
- Li, J., S.-P. Xie et al., 2013: El Nino modulations over the past seven centuries. *Nature Clim. Change*, 3, 822-826.
- Xie, S.-P., B. Lu, and B. Xiang, 2013: Similar spatial patterns of climate responses to aerosol and greenhouse gas changes. *Nature Geosci.*, 6, 828-832.
- Tokenaga, H., S.-P. Xie, C. Deser, Y. Kosaka and Y. M. Okumura, 2012: Slowdown of the Walker circulation driven by tropical Indo-Pacific warming. *Nature*, 491, 439-443.
- Tokenaga, H., and S.-P. Xie, 2011: Weakening of the equatorial Atlantic cold tongue over the past six decades. *Nature Geosci.*, 4, 222-22.
- Johnson, N.C., and S.-P. Xie, 2010: Changes in the sea surface temperature threshold for tropical convection. *Nature Geosci.*, 3, 842-845.
- Xie, S.-P., C. Deser, G.A. Vecchi, J. Ma, H. Teng, and A.T. Wittenberg, 2010: Global warming pattern formation: Sea surface temperature and rainfall. *J. Climate*, 23, 966-986.
- Xie, S.-P., K. Hu, J. Hafner, H. Tokenaga, Y. Du, G. Huang, and T. Sampe, 2009: Indian Ocean capacitor effect on Indo-western Pacific climate during the summer following El Nino. *J. Climate*, 22, 730-747.
- Minobe, S., A. Kuwano-Yoshida, N. Komori, S.-P. Xie, and R.J. Small, 2008: Influence of the Gulf Stream on the troposphere. *Nature*, 452, 206-209.
- Xie, S.-P., W.T. Liu, Q. Liu and M. Nonaka, 2001: Far-reaching Effects of the Hawaiian Islands on the Pacific Ocean-atmosphere system. *Science*, 292, 2057-2060.

Xie, S.-P. and S.G.H. Philander, 1994: A coupled ocean-atmosphere model of relevance to the ITCZ in the eastern Pacific. *Tellus*, 46A, 340-350.