

Shuanggen Jin's Biography

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Shuanggen Jin is Professor at Shanghai Astronomical Observatory, CAS, China, Vice-President & Professor at Henan Polytechnic University, China, Member of Academia Europaea, Member of Turkish Academy of Sciences, Member of European Academy of Science, Member of Russian Academy of Natural Sciences, Member of National Academy of Artificial Intelligence (NAAI), Fellow of African Academy of Sciences, Fellow of Electromagnetics Academy, Fellow of International Union of Geodesy and Geophysics (IUGG), Fellow of International Engineering and Technology Institute (IETI), Fellow of International Association of Geodesy (IAG), Fellow of Asia-Pacific Artificial Intelligence Association (AAIA), World Class Professor of Indonesia Ministry of Education and Cultures, Leading Talent of “Ten-Thousand Talents Program”, Chief Scientist of National Key R&D Program, Hundred-Talent Program of Chinese Academy of Sciences, and Shanghai Leading Talent, China. He received the B.Sc degree in Geodesy from Wuhan University in 1999 and the Ph.D degree in Geodesy from University of Chinese Academy of Sciences in 2003. From 2004-2018, he has been a Visiting Fellow at University of New South Wales, Australia, Post-Doc and Senior Scientist at Korea Astronomy and Space Science Institute, Research Fellow at University of Texas at Austin, USA, Professor at Shanghai Astronomical Observatory, CAS, China, Professor at Bulent Ecevit University, Turkiye, and Dean and Professor at Nanjing University of Information Science and Technology, China. Meanwhile, he has been Adjunct Professor at Southeast University and Tongji University, China, etc.

He has been on Satellite Navigation, Space Geodesy, Remote Sensing and Space/Planetary Science. He established a residual-based stochastic model with greatly improving GNSS accuracy; found a new method to estimate diurnal atmospheric tides by GNSS with overcoming the limitation of traditional techniques; established a high-precision ionospheric model with revealing the mechanism of ionospheric disturbances; proposed GNSS Remote Sensing direction with advancing the research and applications; revealed scattering mechanism with providing the foundation for GNSS-R applications; found strong correlations between GNSS atmospheric disturbances and seismic activities with revealing the mechanism of lithosphere-atmospheric coupling; and promoted planetary geodesy and remote sensing with obtaining new recognitions of the planet's surface and atmosphere. He has published over 500 papers in JGR, IEEE, EPSL, RSE, JG etc. and 15 books/monographs with over 17000 citations and H-index 70 as well as more than 30 patents/software copyrights, 3 codes/standards and over 200 invited talks. He has led over 30 projects from Europe's ESA, China-Germany (NSFC-DFG), China's National Key R&D Program and NSFC. He teaches Geodesy and Geophysics at the undergraduate and graduate level and has supervised over 40 Ph.D and 80 M.Sc as well as 30 Post-Docs.

He has been President of Asia Oceania Geosciences Society (AOGS) Planetary Sciences (2018-2020), President of International Association of Planetary Sciences (IAPS) (2015-2019), President of International Association of Chinese Professionals in GNSS (2016-2017), Chair of IUGG Union Commission on Planetary Sciences (UCPS) (2015-2023), Vice-President of International Association of Geodesy (IAG) Commission 2 (2015-2019), Editor-in-Chief of International Journal of Geosciences (2010-) and Journal of Environmental & Earth Sciences (2018-), Editor of Geoscience Letter (2018-), Associate Editor of IEEE Transactions on Geoscience and Remote Sensing (2014-), Journal of Navigation (2014-) and Advances in Space Research (2013-2017), and Editorial Board Member of Sensors (2021-), Remote Sensing (2017-), GPS Solutions (2016-), Journal of Geodynamics (2014-), Planetary and Space Science (2014-), etc., and General Chairs or Session Chairs of international conferences as well as Reviewer for over 100 international journals, proceedings and proposals. He has received Special Prize of Korea Astronomy and Space Science Institute (2006), Fu Chengyi Award of Chinese Geophysical Society (2012), Xia Jianbai Entrepreneurship & Innovation Award of Geomatics (2014), Second Prize of Shanghai Science & Technology Progress Award (2014), First Prize of Satellite Navigation and Positioning Progress Award (2017), First Prize of China Overseas Chinese Contribution Award (2018), Elsevier China Highly Cited Scholar (2020-2024) and World's Top 2% Scientists (2020-2024).

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Education:

- 1999-2003, Ph.D, Geodesy, University of Chinese Academy of Sciences, Beijing, China
- 1995-1999, B.Sc, Geodesy, Wuhan University, Wuhan, China

Employment:

- 2022-Now, Vice-President & Professor, Henan Polytechnic University, Jiaozuo, Henan, China
- 2018-2022, Dean & Professor, Nanjing University of Information Science and Technology, Nanjing, China
- 2014-2018, Professor, Department of Geomatics Engineering, Bulent Ecevit University, Zonguldak, Turkiye
- 2010-Now, Professor, Shanghai Astronomical Observatory, Chinese Academy of Sciences, Shanghai, China
- 2009-2010, Research Fellow, Center for Space Research, University of Texas at Austin, Austin, USA
- 2005-2009, Post-Doc & Senior Scientist, Korea Astronomy and Space Science Institute, South Korea
- 2003-2005, Assistant Professor, Shanghai Astronomical Observatory, Chinese Academy of Sciences, China

Expertise Areas

- Intelligent Navigation, Space Geodesy, Remote Sensing & Planetary Science

Awards/Honors:

- 07/2025, Member, National Academy of Artificial Intelligence (NAAI), USA
- 01/2025, Fellow, International Engineering and Technology Institute (IETI)
- 10/2023, Leading Talent, Ten-Thousand Talents Program, China.
- 11/2022, Fellow, African Academy of Sciences
- 12/2021, Chief Scientist, National Key Research & Development Program, China
- 11/2021, Fellow, Electromagnetics Academy, USA
- 08/2021, World Class Professor, Ministry of Education and Cultures, Indonesia
- 12/2020, Member, Turkish Academy of Sciences, Turkey
- 07/2019, Member, Academia Europaea
- 01/2019, Fellow, International Union of Geodesy and Geophysics (IUGG)
- 06/2018, Member, European Academy of Sciences
- 06/2018, First Prize, China Overseas Chinese Contribution Award, China
- 12/2017, Member, Russian Academy of Natural Sciences, Russia
- 09/2017, First Prize, Satellite Navigation and Positioning Progress Award, China
- 12/2014, Second Prize, Shanghai Science & Technology Progress Award, China
- 12/2014, Xia Jianbai Entrepreneurship & Innovation Award of Geomatics, China
- 06/2013, Distinguished Young Scientist Award of Scientific Chinese, China
- 10/2012, Fu Chengyi Award, Chinese Geophysical Society, China
- 10/2010, Hundred-Talent Program, Chinese Academy of Sciences, China
- 07/2010, Fellow, International Association of Geodesy (IAG)

Professional Activities:

- 2023-Now, Vice-President, Henan Society of Geomatics, China
- 2021-Now, Chair, Geodesy and Remote Sensing Commission, CGS, China
- 2019-Now, Executive Editor-in-Chief, Satellite Navigation
- 2018-Now, Editor-in-Chief, Journal of Environmental & Earth Sciences
- 2018-Now, Editor, Geoscience Letter
- 2016-2017, President, International Association of Chinese Professionals in GPS (CPGPS)
- 2015-2023, Chair, IUGG Union Commission on Planetary Sciences (UCPS)
- 2015-2019, Vice-President, IAG Commission 2 "Gravity Field"
- 2015-2019, President, International Association of Planetary Sciences (IAPS)
- 2014-Now, Associate Editor, IEEE Transactions on Geoscience and Remote Sensing
- 2014-Now, Associate Editor, Journal of Navigation
- 2013-2017, Associate Editor, Advances in Space Research
- 2010-Now, Editor-in-Chief, International Journal of Geosciences

Publications (>800 papers with over 17000 citations and H-index 70):**Selected Books/Monographs:**

- **Jin, S.G., J. Liu, and Z. Du (2025)**, Modern Geodesy, Science Press, Beijing, China, ISBN: , 300pp.
- **Jin, S.G., X. Wu, and H. Qiu (2025)**, GNSS-Reflectometry, Springer, Germany, 326pp.
- **Jin, S.G. (Ed.) (2023)**, 3S Technology Applications in Meteorology, Taylor & Francis/CRC Press, USA, 439pp.
- **Jin, S.G., X. Wu, and H. Qiu (2021)**, GNSS-R Principle & Applications, Nat. Defense Indust. Press, China, 250pp.
- **Jin, S.G., and X. Wang (2021)**, GNSS Meteorology Principle and Applications, Meteorol. Press, China, 225pp.
- **Jin, S.G., R. Jin, and X. Liu (2019)**, GNSS Atmospheric Seismology, Springer, Germany, 315pp.
- **Jin, S.G., N. Haghighipour & W. Ip (Eds.) (2015)**, Planetary Exploration and Science, Springer, Germany, 340pp.
- **Jin, S.G. (Ed.) (2014)**, Planetary Geodesy and Remote Sensing, Taylor & Francis Group/CRC Press, USA, 396pp.
- **Jin, S.G., E. Cardellach, and F. Xie (2014)**, GNSS Remote Sensing, Springer, Dordrecht, Netherlands, 276pp.
- **Jin, S.G. (Ed.) (2012)**, Global Navigation Satellite Systems, InTech-Publisher, Rijeka, Croatia, 426pp.

Selected Peer-reviewed Journal Papers:

- **Jin, S.G., Z. Chen, and H. Peng (2025)**, High-frequency centimeter-accuracy water level estimation in the Yangtze River using multi-GNSS interferometric reflectometry, *IEEE Trans. Geosci. Remote Sens.*, 63, 5802713. (IF=8.60)
- **Jin, S.G., A. Camps, Y. Jia et al. (2024)**, Remote sensing and its applications using GNSS reflected signals: Advances and prospects, *Satell. Navig.*, 5, 19, doi: 10.1186/s43020-024-00139-4. (IF=11.200)
- **Jin, S.G., and K. Su (2020)**, PPP models and performances from single- to quad-frequency BDS observations, *Satell. Navig.*, 1(1), 16, doi: 10.1186/s43020-020-00014-y. (IF=11.200)
- **Jin, S.G., and K. Su (2019)**, Co-seismic displacement and waveforms of the 2018 Alaska earthquake from high-rate GPS PPP velocity estimation, *J. Geodesy*, 93(9), 1559-1569. (IF=4.809)
- **Jin, S.G. (2018)**, Two-mode ionospheric disturbances following the 2005 Northern California offshore earthquake from GPS measurements, *J. Geophys. Res. Space Physics*, 123(10), 8587-8598. (IF=3.111)
- **Jin, S.G., A. Calabria, and L.L. Yuan (2018)**, Thermospheric variations from GNSS and accelerometer measurements on small satellites, *Proc. IEEE*, 106(3), 484-495, doi: 10.1109/JPROC.2018.2796084. (IF=14.910)
- **Jin, S.G., R. Jin, and D. Li (2017)**, GPS detection of ionospheric Rayleigh wave and its source following the 2012 Haida Gwaii earthquake, *J. Geophys. Res. Space Physics*, 122(1), 1360-1372. (IF=3.111)
- **Jin, S.G., X.D. Qian, and X. Wu (2017)**, Sea level change from BeiDou Navigation Satellite System-Reflectometry (BDS-R): First results and evaluation, *Global Planet. Change*, 149, 20-25. (IF=5.114)
- **Jin, S.G., T.Y. Zhang, and F. Zou (2017)**, Glacial density and GIA in Alaska estimated from ICESat, GPS and GRACE measurements, *J. Geophys. Res. Earth Surface*, 122(1), 76-90, doi: 10.1002/2016JF003926. (IF=4.418)
- **Jin, S.G., R. Jin, and H. Kutoglu (2017)**, Positive and negative ionospheric responses to the March 2015 geomagnetic storm from BDS observations, *J. Geodesy*, 91(6), 613-626. (IF=4.809)
- **Jin, S.G., and T.Y. Zhang (2016)**, Terrestrial water storage anomalies associated with drought in Southwestern USA derived from GPS observations, *Surv. Geophys.*, 37(6), 1139-1156. (IF=7.965)
- **Jin, S.G., X.D. Qian, and H. Kutoglu (2016)**, Snow depth variations estimated from GPS-Reflectometry: A case study in Alaska from L2P SNR data, *Remote Sens.*, 8(1), 63, doi: 10.3390/rs8010063. (IF=5.349)
- **Jin, S.G., X. Tian, and G. Feng (2016)**, Recent glaciers changes in the Tien Shan Mountains observed by satellite gravity measurements, *Global Planet. Change*, 143, 81-87, doi: 10.1016/j.gloplacha.2016.06.006. (IF=5.114)
- **Jin, S.G., G. Occhipinti, and R. Jin (2015)**, GNSS ionospheric seismology: Recent observation evidences and characteristics, *Earth-Sci. Rev.*, 147, 54-64, doi: 10.1016/j.earscirev.2015.05.003. (IF=12.038)
- **Jin, S.G., R. Jin, and J. Li (2014)**, Pattern and evolution of seismo-ionospheric disturbances following the 2011 Tohoku earthquakes from GPS observations, *J. Geophys. Res. Space Physics*, 119(9), 7914-7927. (IF=3.111)
- **Jin, S.G., T. van Dam, and S. Wdowinski (2013)**, Observing and understanding the Earth system variations from space geodesy, *J. Geodyn.*, 72, 1-10, doi: 10.1016/j.jog.2013.08.001. (IF=2.673)
- **Jin, S.G., and G.P. Feng (2013)**, Large-scale variations of global groundwater from satellite gravimetry and hydrological models, 2002-2012, *Global Planet. Change*, 106, 20-30. (IF=5.114)
- **Jin, S.G., L. Zhang, and B.D. Tapley (2011)**, The understanding of length-of-day variations from satellite gravity and laser ranging measurements, *Geophys. J. Int.*, 184(2), 651-660. (IF=3.352)
- **Jin, S.G., D. Chambers, and B. Tapley (2010)**, Hydrological and oceanic effects on polar motion from GRACE and models, *J. Geophys. Res.*, 115, B02403, doi: 10.1029/2009JB006635. (IF=4.390)
- **Jin, S.G., and O.F. Luo (2009)**, Variability and climatology of PWV from global 13-year GPS observations, *IEEE Trans. Geosci. Remote Sens.*, 47(7), 1918-1924, doi: 10.1109/TGRS.2008.2010401. (IF=8.125)
- **Jin, S.G., O. Luo, and S. Gleason (2009)**, Characterization of diurnal cycles in ZTD from a decade of global GPS observations, *J. Geodesy*, 83(6), 537-545, doi: 10.1007/s00190-008-0264-3. (IF=4.809)
- **Jin, S.G., O.F. Luo, and P. Park (2008)**, GPS observations of the ionospheric F2-layer behavior during the 20th November 2003 geomagnetic storm over South Korea, *J. Geodesy*, 82(12), 883-892. (IF=4.809)
- **Jin, S.G., J. Park, J. Cho, and P. Park (2007)**, Seasonal variability of GPS-derived Zenith Tropospheric Delay (1994-2006) and climate implications, *J. Geophys. Res.*, 112, D09110, doi: 10.1029/2006JD007772. (IF=5.217)
- **Jin, S.G., P.H. Park, and W.Y. Zhu (2007)**, Micro-plate tectonics and kinematics in Northeast Asia inferred from a dense set of GPS observations, *Earth Planet. Sci. Lett.*, 257(3-4), 486-496. (IF=5.785)