

**The List of Journal Papers Published by Prof. George Zhizhao Liu's
Micro-LARGE Laboratory
(As of 17 August 2023, Total IF: 415.344;
Mean IF of all the 89 SCI papers: 4.667; Mean IF of all the 111 papers: 3.742)**

No.	Full Citation Information	Name of Journal	Impact Factor (IF)
J111	Xu, Jiafei*, Zhizhao Liu (✉) (2023), Long-Term Calibration of Satellite-based All-Weather Precipitable Water Vapor Product from FengYun-3A MERSI Near-Infrared Bands from 2010 through 2017 in China, IEEE Transactions On Geoscience and Remote Sensing , published.	IEEE Transactions On Geoscience and Remote Sensing	8.2
J110	Donghe Zhang (✉), Hongyu Gao, Zhizhao Liu , Shuji Sun, Yong-Qiang Hao, Zuo Xiao (2023), Revisiting the variation of the ionospheric irregularities in the low latitude region of China based on small regional geodetic GNSS station network, Space Weather , Accepted.	Space Weather	3.7
J109	Xu, Jiafei*, Zhizhao Liu (✉) (2023), A Gradient Boosting Decision Tree Based Correction Model for AIRS Infrared Water Vapor Product, Geophysical Research Letters , accepted.	Geophysical Research Letters	5.2
J108	Gao, Rui*, Zhizhao Liu (✉), Robert Odolinski, Qiang Jing, Jiantong Zhang, Hua Zhang, and Baocheng Zhang (✉) (2023), Hong Kong-Zhuhai-Macao Bridge deformation monitoring using PPP-RTK with multipath correction method, GPS Solutions , accepted.	GPS Solutions	4.9
J107	Xu, Jiafei*, Zhizhao Liu (✉) (2023), Improving the Accuracy of MODIS Near-Infrared Water Vapor Product Under all Weather Conditions Based on Machine Learning Considering Multiple Dependence Parameters. IEEE Transactions on Geoscience and Remote Sensing , 61: 1–15. https://doi.org/10.1109/TGRS.2023.3252024 .	IEEE Transactions on Geoscience and Remote Sensing	8.2
J106	Xue, Dabin*, Jian Yang (✉), Zhizhao Liu (✉), Shiwei Yu (2022), Examining the Economic Costs of the 2003 Halloween Storm Effects on the North Hemisphere Aviation Using Flight Data in 2019, Space Weather , Space Weather , 21(3): e2022SW003381. https://doi.org/10.1029/2022SW003381 ..	Space Weather	3.7
J105	Gong, Yangzhao*, Zhizhao Liu (✉), Pak Wai Chan, and Kai Kwong Hon (2021), Assimilating GNSS PWV and radiosonde meteorological profiles to improve the PWV and rainfall forecasting performance from the Weather Research and Forecasting (WRF) model over the	Atmospheric Research	5.5

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	South China, Atmospheric Research , 286: 106677. https://doi.org/10.1016/j.atmosres.2023.106677 .		
J104	Ning, Guicai*, Ming Luo, Xueyan Bi, Zhizhao Liu , Hui Zhang, Meng Huang, Xiaogang Huang, Yuanjian Yang, and Sijia Wu. 2023. "Large-Scale Moisture Transport and Local-Scale Convection Patterns Associated with Warm-Sector Heavy Rainfall over South China." Atmospheric Research , 285 (April): 106637. https://doi.org/10.1016/j.atmosres.2023.106637 .	Atmospheric Research	5.5
J103	Zhang, Shengkai, Li Gong, Wenliang Gao, Qi Zeng, Feng Xiao, Zhizhao Liu , Jintao Lei (2023), A weighted mean temperature model using principal component analysis for Greenland. GPS Solutions , 27(1): 57. https://doi.org/10.1007/s10291-022-01392-3	GPS Solutions	4.9
J102	Xu, Jiafei*, Zhizhao Liu (✉) (2023), A Back Propagation Neural Network-Based Calibration Approach for Sentinel-3 OLCI Near-Infrared Water Vapor Product. IEEE Geoscience and Remote Sensing Letters , 20, 1–5. https://doi.org/10.1109/LGRS.2023.3235983	IEEE Geoscience and Remote Sensing Letters	2.892
J101	Gong, Yangzhao*, Zhizhao Liu (✉), Pak Wai Chan, and Kai Kwong Hon (2023), Assimilating Sentinel-3 All-sky PWV Retrievals to Improve the WRF Forecasting Performance Over the South China. Journal of Geophysical Research: Atmospheres , 128(8): e2022JD037979. https://doi.org/10.1029/2022JD037979	Journal of Geophysical Research: Atmospheres	4.4
J100	Xu, Jiafei*, Zhizhao Liu (✉) (2022), A Back Propagation Neural Network-Based Algorithm For Retrieving All-Weather Precipitable Water Vapor From MODIS NIR Measurements. IEEE Transactions on Geoscience and Remote Sensing , 60, 1–14. https://doi.org/10.1109/TGRS.2022.3219405	IEEE Transactions on Geoscience and Remote Sensing	8.2
J099	Gao Zhiqiu, Jianbin Zhang, Miao Yu, Zhizhao Liu , Ruoying Yin, Shaohui Zhou, Lian Zong, Guicai Ning, Xiaoze Xu, Yunqian Guo, Han Wei, Yuanjian Yang (2022), Role of water vapor modulation from multiple pathways in the occurrence of a record-breaking heavy rainfall event in China in 2021, Earth and Space Science , https://doi.org/10.1029/2022EA002357 .	Earth and Space Science	3.1
J098	Gao, Rui*, Zhizhao Liu , and Baocheng Zhang (2022), Ionosphere-weighted post-processing kinematic for airborne positioning with refined modeling of receiver phase biases and tropospheric zenith wet delays, GPS Solutions , 26, 113 (2022). https://doi.org/10.1007/s10291-022-01299-z .	GPS Solutions	4.9
J097	Xue, Dabin*, Jian Yang, Zhizhao Liu (✉), Bing Wang (2022), An Optimized Solution to Long-Distance Flight Routes Under Extreme Cosmic Radiation. Space Weather , 20(12): e2022SW003264. https://doi.org/10.1029/2022SW003264 .	Space Weather	3.7
J096	Xu, Jiafei*, Zhizhao Liu (✉) (2023), Water vapour products from ERA5, MERSI-II/FY-3D, Quarterly Journal of the	Quarterly Journal of the	8.9

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	OLCI/Sentinel-3A, OLCI/Sentinel-3B, MODIS/Aqua, and MODIS/Terra in Australia: a comparison against in-situ GPS water vapor data, Atmospheric Research, Quarterly Journal of the Royal Meteorological Society (QJRMS) , 149, 1435–1458. https://doi.org/10.1002/qj.4467	Royal Meteorological Society (QJRMS)	
J095	Xu, Jiafei*, Zhizhao Liu (✉) (2022), A Linear Regression of Differential PWV Calibration Model to Improve the Accuracy of MODIS NIR All-weather PWV Products Based on Ground-based GPS PWV Data, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing , 15, 7929–7951. https://doi.org/10.1109/JSTARS.2022.3204823 .	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing	5.5
J094	Xu, Jiafei*, Zhizhao Liu (✉) (2022), Enhanced all-weather precipitable water vapor retrieval from MODIS near-infrared bands using machine learning. International Journal of Applied Earth Observation and Geoinformation , 114, 103050. https://doi.org/10.1016/j.jag.2022.103050	International Journal of Applied Earth Observation and Geoinformation	7.5
J093	Xu, Jiafei*, Zhizhao Liu (✉) (2022), Evaluation of Precipitable Water Vapor Product From MODIS and MERSI-II NIR Channels Using Ground- Based GPS Measurements Over Australia. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing , 15, 8744–8758. https://doi.org/10.1109/JSTARS.2022.3211879 .	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing	5.5
J092	Yu, Shiwei*, Zhizhao Liu (✉), Tsz Cheung Lee (2021), Ionospheric Disturbances Observed from a Single GPS Station in Hong Kong During the Passage of Super Typhoon Hato in 2017, Space Weather , Vol. 20, Issue 1, https://doi.org/10.1029/2021SW002850	Space Weather	3.7
J091	Xue, Dabin*, Jian Yang, and Zhizhao Liu (✉) (2022). Potential Impact of GNSS Positioning Errors on the Satellite-navigation-based Air Traffic Management. Space Weather . JCR: Q1, IF: 4.4. accepted.	Space Weather	3.7
J090	Gong, Yangzhao*, Zhizhao Liu (✉), James H. Foster (2021), Evaluating the Accuracy of Satellite-based Microwave Radiometer PWV Products Using Shipborne GNSS Observations across the Pacific Ocean, IEEE Transactions on Geoscience and Remote Sensing (TGRS) , accepted.	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J089	Xu, Jiafei*, Zhizhao Liu (✉) (2021), Radiance-based Retrieval of Total Water Vapor Content from Sentinel-3A OLCI NIR Channels Using Ground-based GPS Measurements, International Journal of Applied Earth Observation and Geoinformation , Volume 104, 102586. https://doi.org/10.1016/j.jag.2021.102586 , IF: 5.933	International Journal of Applied Earth Observation and Geoinformation	7.5
J088	Xu, Jiafei*, Zhizhao Liu (✉) (2022), The First Validation of Sentinel-3 OLCI Integrated Water Vapor Products Using Reference GPS Data in Mainland China, IEEE Transactions on Geoscience and Remote Sensing (TGRS) , 60, 1–17. https://doi.org/10.1109/TGRS.2021.3099168 .	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J087	Yu, Shiwei*, Zhizhao Liu (✉) (2021), The Ionospheric Condition and GPS Positioning	Earth Planets Space	3

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	Performance during the 2013 Tropical Cyclone Usagi Event in the Hong Kong Region, Earth Planets Space , 73(1): 66. https://doi.org/10.1186/s40623-021-01388-2 .		
J086	He, Jia*, Zhizhao Liu (✉) (2021), Water Vapor Retrieval from MERIS NIR Channels of Fengyun-3B Satellite Using Ground-based GPS Data, Remote Sensing of Environment , 258: 112384. https://doi.org/10.1016/j.rse.2021.112384 , 11 pages	Remote Sensing of Environment	13.5
J085	Yu, Shiwei*, Zhizhao Liu (✉) (2021), Tropical cyclone-induced periodical positioning disturbances during the 2017 Hato in the Hong Kong region, GPS Solutions , 25(3): 109. https://doi.org/10.1007/s10291-021-01112-3 .	GPS Solutions	4.9
J084	He, Jia*, Zhizhao Liu (✉) (2021), Applying the New MODIS-Based Precipitable Water Vapor Retrieval Algorithm Developed in the North Hemisphere to the South Hemisphere, IEEE Transactions on Geoscience and Remote Sensing (TGRS) , vol. 60, pp. 1-12, 2022, Art no. 4100812, doi: 10.1109/TGRS.2021.3059876, 12 pages	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J083	Yu, Shiwei*, Zhizhao Liu (✉) (2020), Temporal and Spatial Impact of the Precipitable Water Vapor on the GPS Relative Positioning during the Hato (2017) in Hong Kong and Taiwan Regions, Earth and Space Science , 8(4): e2020EA001371. https://doi.org/10.1029/2020EA001371 . IF: 2.31	Earth and Space Science	3.1
J082	Gong, Yangzhao*, Zhizhao Liu (✉) (2020), Evaluating the Accuracy of Jason-3 Water Vapor Product Using PWV Data from Global Radiosonde and GNSS Stations, IEEE Transactions on Geoscience and Remote Sensing (TGRS) , 59(5): 4008–4017. https://doi.org/10.1109/TGRS.2020.3017761 , 10 pages.	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J081	Li, Guozhu, Baiqi Ning, Yuichi Otsuka, Mangalathayil Ali Abdu, Prayitno Abadi, Zhizhao Liu , Luca Spogli, and Weixing Wan (2020), Challenges to equatorial plasma bubble and ionospheric scintillation short-term forecasting and future aspects in East and Southeast Asia, Surveys in Geophysics , DOI: 10.1007/s10712-020-09613-5.	Surveys in Geophysics	4.6
J080	He, Jia*, Zhizhao Liu (✉) (2020), Refining MODIS NIR Atmospheric Water Vapor Retrieval Algorithm Using GPS-derived Water Vapor Data. IEEE Transactions on Geoscience and Remote Sensing (TGRS) , 59(5): 3682–3694. https://doi.org/10.1109/TGRS.2020.3016655 , 13 pages	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J079	Zhu, Mingchen*, Zhizhao Liu (✉), Wusheng Hu (2020), Observing Water Vapor Variability during Three Super Typhoon Events in Hong Kong Based on GPS Water Vapor Tomographic Modeling Technique, Journal of Geophysical Research: Atmospheres , Vol. 125, No 15, https://doi.org/10.1029/2019JD032318 , 20 pages.	Journal of Geophysical Research: Atmospheres	4.4
J078	He, Jia*, Zhizhao Liu (✉) (2020), Water Vapor Retrieval from MODIS NIR Channels Using Ground-Based GPS Data. IEEE Transactions on Geoscience and Remote Sensing (TGRS) , 58 (5): 3726–37, 12 pages, https://doi.org/10.1109/TGRS.2019.2962057	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2

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J077	He, Jia*, Zhizhao Liu (✉) (2019), Comparison of Satellite-derived Precipitable Water Vapor through Near-Infrared Remote Sensing Channels, IEEE Transactions on Geoscience and Remote Sensing (TGRS) , 57(12):10252-10262, 11 pages, doi: 10.1109/TGRS.2019.2932847	IEEE Transactions on Geoscience and Remote Sensing (TGRS)	8.2
J076	Jungang Wang*, Zhizhao Liu (✉) (2019), Improving GNSS PPP Accuracy through WVR PWV Augmentation, Journal of Geodesy , 93(9):1685–1705, 21 pages, https://doi.org/10.1007/s00190-019-01278-2	Journal of Geodesy	4.4
J075	Wang, Ling, Xiuqing Hu, Yupeng Luo, Zhizhao Liu , Min Min (2019), Selection and Characterization of Glaciers on the Tibetan Plateau as Potential Pseudo-Invariant Calibration Sites, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS) , 12(2):424–436, 13 pages. doi: 10.1109/JSTARS.2018.2890672	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing	5.5
J074	Tian, Yumiao, Zhizhao Liu (✉), Maorong Ge, Frank Neitzel (2019), Multi-dimensional particle filter-based estimation of inter-system phase biases for multi-GNSS real-time integer ambiguity resolution, Journal of Geodesy , 93(7):1073–1087, 15 pages. https://doi.org/10.1007/s00190-018-01226-6 .	Journal of Geodesy	4.4
J073	Yu, Tao (✉), Mingyuan Li, Chunliang Xia, Xiaomin Zuo, Zhizhao Liu and Biqiang Zhao (2018), A new method for deriving equatorial plasma bubble velocity by tracing OI 630 nm all-sky images, Journal of Geophysical Research: Space Physics , 123, 9619–9633, 15 pages. https://doi.org/10.1029/2018JA025332 . This paper won the award of “ Ten Major Scientific and Application Achievements of China's Meridian Project in 2018 ” awarded by National Space Weather Science Center, Chinese Academy of Sciences (CAS), China, 21 January 2019	Journal of Geophysical Research: Space Physics	2.8
J072	Xiaomin Luo, Yidong Lou, Qinqin Xiao, Shengfeng Gu, Biyan Chen and Zhizhao Liu (2018), Investigation of ionospheric scintillation effects on BDS precise point positioning at low-latitude regions, GPS Solutions , 22:63, 12 pages	GPS Solutions	4.9
J071	Chen, Biyan, Wujiao Dai, Zhizhao Liu , Lixin Wu, Cuilin Kuang, and Minsi Ao (2018), Constructing a Precipitable Water Vapor Map from Regional GNSS Network Observations without Collocated Meteorological Data. Atmospheric Measurement Techniques , 11(9):5153–5166, 14 pages. https://doi.org/10.5194/amt-2018-83	Atmospheric Measurement Techniques	3.8
J070	Yang, Zhe*, Zhizhao Liu (✉) (2017), Low-Latitude Ionospheric Density Irregularities and Associated Scintillations Investigated by Combining COSMIC RO and Ground-Based GPS Observations over a Solar Active Period, Journal of Geophysical Research: Space Physics , 123:3998–4014, 17 pages. doi: 10.1029/2017JA024199	Journal of Geophysical Research: Space Physics	2.8
J069	Tian, Yumiao*, Zhizhao Liu (✉), Maorong Ge, Frank Neitzel (2017), Determining inter-system bias of GNSS signals with narrowly spaced frequencies for GNSS positioning, Journal of Geodesy , 92(8):873–887, 15 pages, DOI: 10.1007/s00190-017-1100-4	Journal of Geodesy	4.4
J068	Sanjay Kumar*, Wu Chen, Mingli Chen, Zhizhao Liu and R.P. Singh (2017),	Journal of Geophysical	2.8

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	Thunderstorm/Lightning induced ionospheric perturbation: An observation from equatorial and low latitude stations around Hong Kong, Journal of Geophysical Research: Space Physics , 122:9032–9044, 13 pages, doi:10.1002/2017JA023914	Research: Space Physics	
J067	Biyan Chen*, Zhizhao Liu (✉) (2016), Global Water Vapor Variability and Trend from the Latest 36-Year (1979 to 2014) Data of ECMWF and NCEP Reanalyses, Radiosonde, GPS and Microwave Satellite, Journal of Geophysical Research: Atmospheres , 121:11,442–11,462, 21 pages. doi:10.1002/2016JD024917.	Journal of Geophysical Research: Atmospheres	4.4
J066	Kumar, Sanjay*, Wu Chen, Zhizhao Liu , Shengyue Ji (2016), Effects of solar and geomagnetic activity on the occurrence of equatorial plasma bubbles over Hong Kong, Journal of Geophysical Research: Space Physics , 121:9164–9178, 15 pages, doi: 10.1002/2016JA022873 .	Journal of Geophysical Research: Space Physics	2.8
J065	Yu, Tao*, Chunliang Xia, Xiaomin Zuo, Cong Huang, Tian Mao, Libo Liu, Zhizhao Liu (2016), A comparison of mesospheric winds measured by Fabry Perot interferometer and Meteor Radar over Center China, Journal of Geophysical Research: Space Physics , 121:10,037–10,051, 15 pages. doi: 10.1002/2016JA022997	Journal of Geophysical Research: Space Physics	2.8
J064	Yang, Zhe* and Zhizhao Liu (✉) (2017), Investigating the Inconsistency of Ionospheric ROTI Indices Derived from GPS Modernized L2C and Legacy L2 P(Y) Signals at Low-Latitude Regions, GPS Solutions , 21(2):783–796, 14 pages, doi:10.1007/s10291-016-0568-3.	GPS Solutions	4.9
J063	Yang, Zhe*, Zhizhao Liu (✉) (2016), Observational Study of Ionospheric Irregularities and GPS Scintillations Associated with the 2012 Tropical Cyclone Tembin Approaching Hong Kong, Journal of Geophysical Research: Space Physics , 121:4705–4717, 13 pages, doi:10.1002/2016JA022398.	Journal of Geophysical Research: Space Physics	2.8
J062	Zhang, Bochen, Xiaoli Ding, Wu Zhu, Chisheng Wang, Lei Zhang, and Zhizhao Liu . (2016), Mitigating Ionospheric Artifacts in Coseismic Interferogram Based on Offset Field Derived From ALOS-PALSAR Data, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing , 9(7):3050–3059, 10 pages. doi:10.1109/JSTARS.2016.2533441.	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing	5.5
J061	Zhao, Qile, Guangxing Wang (✉), Zhizhao Liu (✉), Zhigang Hu, Zhiqiang Dai, and Jingnan Liu (2016). Analysis of BeiDou Satellite Measurements with Code Multipath and Geometry-Free Ionosphere-Free Combinations. Sensors , 16(1):123, 15 pages. doi:10.3390/s16010123.	Sensors	3.9
J060	Shi, Chuang, Lei Fan, Min Li, Zhizhao Liu , Shengfeng Gu, Shiming Zhong, and Weiwei Song (2015), An Enhanced Algorithm to Estimate BDS Satellite's Differential Code Biases, Journal of Geodesy , 90(2):161–177, 17 pages. doi:10.1007/s00190-015-0863-8.	Journal of Geodesy	4.4
J059	Chen, Biyan* and Zhizhao Liu (✉) (2015), A Comprehensive Evaluation and Analysis of the Performances of Multiple Tropospheric Models in China Region, IEEE Transactions on Geoscience and Remote	IEEE Transactions on Geoscience and Remote	8.2

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	Geoscience and Remote Sensing (TGRS) , 54(2):663–678, 16 pages. doi:10.1109/TGRS.2015.2456099.	Sensing (TGRS)	
J058	Zhe Yang*, Zhizhao Liu (✉) (2015), Correlation between ROTI and Ionospheric Scintillation Indices using Hong Kong low-latitude GPS data. GPS Solutions , 20(4): 815–824, 10 pages, doi:10.1007/s10291-015-0492-y.	GPS Solutions	4.9
J057	Liu, Zhizhao (✉) and Zhe Yang* (2015), Anomalies in broadcast ionospheric coefficients recorded by GPS receivers over the past two solar cycles (1992-2013). GPS Solutions , 20(1):23–37, 15 pages, doi:10.1007/s10291-015-0448-2.	GPS Solutions	4.9
J056	Chen, Biyan* and Zhizhao Liu (✉) (2014), Voxel-optimized regional water vapor tomography and comparison with radiosonde and numerical weather model. Journal of Geodesy , 88(7):691–703, 13 pages, doi: 10.1007/s00190-014-0715-y	Journal of Geodesy	4.4
J055	Liu, Zhizhao (✉), Biyan Chen*, Sai Tick Chan, Yunchang Cao, Yang Gao, Kefei Zhang, and Janet Nichol (2014), Analysis and modeling of water vapor and temperature changes in Hong Kong using a 40-year radiosonde record: 1973-2012. International Journal of Climatology , 35(3):462–474, 13 pages, doi:10.1002/joc.4001	International Journal of Climatology	3.9
J054	Liu, Zhizhao , Man Sing Wong*, Janet Elizabeth Nichol, and P.W. Chan (2013), A multi-sensor study of water vapor from Radiosonde, MODIS and AERONET: a case study of Hong Kong. International Journal of Climatology , 33(1):109–120, 12 pages, doi: 10.1002/joc.3412	International Journal of Climatology	3.9
J053	Xu, Rui*, Zhizhao Liu (✉), Wu Chen (2015), Improved FLL-assisted PLL with in-phase pre-filtering to mitigate amplitude scintillation effects. GPS Solutions , 19(2):263–276, 14 pages, doi: 10.1007/s10291-014-0385-5	GPS Solutions	4.9
J052	Liu, Zhizhao (✉), Min Li*, Weikun Zhong*, Mansing Wong (2013), An Approach to Evaluate the Absolute Accuracy of WVR Water Vapor Measurements Inferred from Multiple Water Vapor Techniques. Journal of Geodynamics , 72:86–94, 9 pages, doi:10.1016/j.jog.2013.09.002, Nominated for the World Meteorological Organization (WMO) “Norbert Gerbier-MUMM International Award for 2015”, by the Hong Kong Observatory, The Government of Hong Kong Special Administrative Region (HKSAR).	Journal of Geodynamics	2.3
J051	Luo, Weihua*, Zhizhao Liu (✉) and Min Li* (2013), A Preliminary Evaluation of the Performance of Multiple Ionospheric Models in Low- and Mid-Latitude Regions of China in 2010-2011. GPS Solutions , 18(2):297–308, 12 pages. doi: 10.1007/s10291-013-0330-z	GPS Solutions	4.9
J050	Li, Zhongbin*, Zhizhao Liu , and Wenzhong Shi (2014), Semiautomatic Airport Runway Extraction Using a Line-Finder-Aided Level Set Evolution. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS) , 7(12):4738–4749, 12 pages, doi: 10.1109/JSTARS.2014.2298332	IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing	5.5
J049	Liu, Zhizhao (✉), Shengyue Ji*, Wu Chen, and Xiaoli Ding (2013), New Fast Precise	Journal of Surveying	1.576

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	Kinematic Surveying Method Using A Single Dual-Frequency GPS Receiver, Journal of Surveying Engineering (ASCE, American Society of Civil Engineers) , 139(1):19–33, 15 pages, DOI: 10.1061/(ASCE)SU.1943-5428.0000092	Engineering	
J048	Cai, Changsheng, Zhizhao Liu (✉), Pengfei Xia, Wujiao Dai (2013), Cycle-slip detection and repair for undifferenced GPS observations under high ionospheric activity, GPS Solutions , 17(2):247–260, 14 pages, DOI: 10.1007/s10291-012-0275-7 (ranked 2 nd in the top five most downloaded papers in the journal with 339 downloads within 90 days of its online publication. To the author's knowledge, this innovative method has been used by researchers in world's leading research institutions such as Helmholtz Centre Potsdam GeoForschungsZentrum (GFZ) German Research Centre for Geosciences, Germany, Space Star Technology Co., Ltd, 5th Research Academy, China Aerospace Science and Technology Corporation.)	GPS Solutions	4.9
J047	Liu, Zhizhao (✉)(2011), A New Automated Cycle Slip Detection and Repair Method for a Single Dual-Frequency GPS Receiver, Journal of Geodesy , 85(3):171–183, 13 pages, DOI 10.1007/s00190-010-0426-y (ranked 3 rd as one of the top five most downloaded papers in the journal with 308 downloads within 90 days of its online publication, in addition to the downloads directly from author's personal website. This method so far has been implemented by researchers at 10+ research groups in UK, China and Canada Universities, including University of New Brunswick (Canada), University of Calgary (Canada), Imperial College London (UK), Wuhan University (China), Peking University (China), Beijing University of Aeronautics and Astronautics (China), Central South University (China), Hohai University (China), Chinese University of Mining Technology (China), The PLA Information Engineering University (China).)	Journal of Geodesy	4.4
J046	Tang, Xu, Zhizhao Liu , Gethin Wyn Roberts, Craig Matthew Hancock (2022), PPP-derived tropospheric ZWD augmentation from local CORS network tested on bridge monitoring points, Advances in Space Research , Vol 69, Issue 10, Pages 3633-3643	Advances in Space Research	2.6
J045	Xue, Dabin*, Zhizhao Liu , Bing Wang, Jian Yang (✉) (2021), Impacts of COVID-19 on aircraft usage and fuel consumption: a case study on four Chinese international airports, Journal of Air Transport Management , 95: 102106. https://doi.org/10.1016/j.jairtraman.2021.102106	Journal of Air Transport Management	6
J044	Liu, Zhizhao (✉), Zhe Yang* (✉), Dongyang Xu, Y. Jade Morton (2019), On Ionospheric Irregularities Characterized by Inconsistent ROTI Derived from Multi-Constellation GNSS Measurements Based on Globally Distributed GNSS Receivers, Radio Science , 54(3):215–232, 18 pages. https://doi.org/10.1029/2018RS006596	Radio Science	1.678
J043	Luo, Xiaomin, Zhizhao Liu (✉), Yidong Lou (✉), Shengfeng Gu, Biyan Chen (2017), A Study of Multi-GNSS Ionospheric Scintillation and Cycle-Slip over Hong Kong Region for Moderate	Advances in Space Research	2.6

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	Solar Flux Conditions. Advances in Space Research , 60(5):1039–1053, 15 pages, doi: 10.1016/j.asr.2017.05.038		
J042	Biyan Chen*, Zhizhao Liu (✉), Wai-Kin Wong, Woo-Wang Chun (2017), Detecting Water Vapor Variability During Heavy Precipitation Events in Hong Kong Using the GPS Tomographic Technique, Journal of Atmospheric and Oceanic Technology , 34(5):1001–1019, 19 pages, doi: 10.1175/JTECH-D-16-0115.1	Journal of Atmospheric and Oceanic Technology	2.2
J041	Chen, Biyan*, Zhizhao Liu (✉) (2016), Assessing the Performance of Troposphere Tomographic Modeling Using Multi-Source Water Vapor Data During Hong Kong's Rainy Season from May to October 2013, Atmospheric Measurement Techniques (AMT) , 9(10):5249–5263, 15 pages, https://doi.org/10.5194/amt-9-5249-2016	Atmospheric Measurement Techniques	3.8
J040	Song, Aotian, Lin Lu, Zhizhao Liu , Man Sing Wong (2016), A Study of Incentive Policies for Building-Integrated Photovoltaic Technology in Hong Kong. Sustainability , 8(8):769, 21 pages. doi:10.3390/su8080769	Sustainability	3.9
J039	Wong, Man Sing, Rui Zhu, Zhizhao Liu , Lin Lu, Chung Ho Lo, Zhaoqin Tang (2016), Estimation of Hong Kong's solar energy potential using GIS and remote sensing technologies, Renewable Energy , 99:325–335, 11 pages, doi:10.1016/j.renene.2016.07.003	Renewable Energy	8.7
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