

- Total citation: **907**
- Without self-citations: **850**
- h-index: **19**
- i10-index: **29**
- Total Publications: **60**
(**47** papers; **11** conference proceedings and **2** book chapters)
- As First/Corresponding Author: **22**
(**14** papers; **6** conference proceedings and **2** book chapters)

PUBLICATION LIST

Journal Publications

- 1) **Li, Dongshuai (CA)**, Alejandro Luque, Farhad Rachidi, ... Paul R. Krehbiel. Propagation Effects of Slanted Narrow Bipolar Events: A Rebounding-wave Model Study (2024). *Journal of Geophysical Research: Atmospheres*, 129, e2023JD040497.
- 2) **Li, Dongshuai (CA)**, Torsten Neubert, Lasse Skaaning Husbjerg, ... Víctor Reglero. Observation of Blue Corona Discharges and Cloud Microphysics in the Top of Thunderstorm Cells in Cyclone Fani (2023). *Journal of Geophysical Research: Atmospheres*, 128, e2022JD038328.
- 3) **Li, Dongshuai (CA)**, Luque, Alejandro, Gordillo-Vázquez, FJ, Pérez-Invernón, FJ, Husbjerg, Lasse, Neubert, Torsten, . . . Han, Jing. (2023). Different types of corona discharges associated with high-altitude positive Narrow Bipolar Events near cloud top. *Journal of Geophysical Research: Atmospheres*, 128, e2022JD037883.
- 4) **Li, Dongshuai (CA)**, Luque, Alejandro, Lehtinen, Nikolai G, Gordillo-Vázquez, Francisco J, Neubert, Torsten, Lu, Gaopeng, . . . Reglero, Víctor. (2022). Multi-Pulse Corona Discharges in Thunderclouds Observed in Optical and Radio Bands. *Geophysical Research Letters*, 49(13), e2022GL098938.
- 5) **Li, Dongshuai (CA)**, Luque, Alejandro, Gordillo-Vázquez, Francisco J, Silva, Caitano da, Krehbiel, Paul R, Rachidi, Farhad, & Rubinstein, Marcos. (2022). Secondary fast breakdown in narrow bipolar events. *Geophysical Research Letters*, 49(7), e2021GL097452.
- 6) **Li, Dongshuai (CA)**, Luque, Alejandro, Gordillo-Vázquez, Francisco J, Liu, Feifan, Lu, Gaopeng, Neubert, Torsten, . . . Reglero, Víctor. (2021). Blue flashes as counterparts to narrow bipolar events: The optical signal of shallow in-cloud discharges. *Journal of Geophysical Research: Atmospheres*, 126(13), e2021JD035013.
- 7) **Li, Dongshuai (CA)**, Liu, Feifan, Pérez-Invernón, Francisco J, Lu, Gaopeng, Qin, Zilong, Zhu, Baoyou, & Luque, Alejandro. (2020). On the Accuracy of ray-theory methods to determine the altitudes of intracloud electric discharges and ionospheric reflections: Application to narrow bipolar events. *Journal of Geophysical Research: Atmospheres*, 125(9), e2019JD032099.
- 8) **Li, Dongshuai (CA)**, Luque, Alejandro, Rachidi, Farhad, Rubinstein, Marcos, Azadifar, Mohammad, Diendorfer, Gerhard, & Pichler, Hannes. (2019). The propagation effects of lightning electromagnetic fields over mountainous terrain in the earth-Ionosphere waveguide. *Journal of Geophysical Research: Atmospheres*, 124(24), 14198-14219.
- 9) **Li, Dongshuai (CA)**, Rubinstein, Marcos, Rachidi, Farhad, Diendorfer, Gerhard, Schulz, Wolfgang, & Lu, Gaopeng. (2017). Location Accuracy Evaluation of ToA-Based Lightning Location Systems Over Mountainous Terrain. *Journal of Geophysical Research: Atmospheres*, 122.
- 10) **Li, Dongshuai (CA)**, Azadifar, Mohammad, Rachidi, Farhad, Rubinstein, Marcos, Diendorfer, Gerhard, Sheshyekani, Keyhan, . . . Wang, Zhenhui. (2016). Analysis of lightning electromagnetic field propagation in mountainous terrain and its effects on ToA-based lightning location systems. *Journal of Geophysical Research: Atmospheres*, 121(2), 895-911.

- 11) **Li, Dongshuai (CA)**, Azadifar, Mohammad, Rachidi, Farhad, Rubinstein, Marcos, Paolone, Mario, Pavanello, Davide, . . . Wang, Zhenhui. (2015). On lightning electromagnetic field propagation along an irregular terrain. *IEEE Transactions on Electromagnetic Compatibility*, 58(1), 161-171.
- 12) **Li, Dongshuai (CA)**, Zhang, Qilin, Wang, Zhenhui, & Liu, Tao. (2013). Computation of lightning horizontal field over the two-dimensional rough ground by using the three-dimensional FDTD. *IEEE Transactions on Electromagnetic Compatibility*, 56(1), 143-148.
- 13) **Li, Dongshuai (CA)**, Zhang, Qilin, Liu, Tao, & Wang, Zhenhui. (2013). Validation of the Cooray-Rubinstein (C-R) formula for a rough ground surface by using three-dimensional (3-D) FDTD. *Journal of Geophysical Research: Atmospheres*, 118(22), 12,749-712,754.
- 14) Zhang, Qilin, **Li, Dongshuai (CA)**, Fan, Yanfeng, Zhang, Yuanyuan, & Gao, Jinge. (2012). Examination of the Cooray-Rubinstein (C-R) formula for a mixed propagation path by using FDTD. *Journal of Geophysical Research: Atmospheres*, 117(D15).
- 15) Azadifar, Mohammad, **Li, Dongshuai**, Rachidi, Farhad, Rubinstein, Marcos, Diendorfer, Gerhard, Schulz, Wolfgang, . . . Pavanello, Davide. (2017). Analysis of lightning-ionosphere interaction using simultaneous records of source current and 380 km distant electric field. *Journal of Atmospheric and Solar-Terrestrial Physics*, 159, 48-56.
- 16) Liu, Tao, **Li, Dongshuai**, & Zhang, Qilin. (2016). The New Formula for Calculating Lightning-Radiated Horizontal Electric Field of Two-Dimensional (2-D) Rough Ground Surface (in Chinese). *Insulators and Surge Arresters*, (06), 68-72.
- 17) Zhang, Qilin, **Li, Dongshuai**, Tang, Xiao, & Wang, Zhenhui. (2013). Lightning-radiated horizontal electric field over a rough-and ocean-land mixed propagation path. *IEEE Transactions on Electromagnetic Compatibility*, 55(4), 733-738.
- 18) Zhang, Qilin, **Li, Dongshuai**, Zhang, Yuanyuan, Gao, Jinge, & Wang, Zhenhui. (2012). On the accuracy of Wait's formula along a mixed propagation path within 1 km from the lightning channel. *IEEE Transactions on Electromagnetic Compatibility*, 54(5), 1042-1047.
- 19) Zhang, Qilin, **Li, Dongshuai**, Fan, Yanfeng, Zhang, Yuanyuan, & Gao, Jinge. (2012). Examination of the Cooray-Rubinstein (C-R) formula for a mixed propagation path by using FDTD. *Journal of Geophysical Research: Atmospheres*, 117(D15).
- 20) Feifan Liu, Torsten Neubert, Olivier Chanrion, Gaopeng Lu, Ting Wu, Fanchao Lyu, Weitao Lyu, Christoph Köhn, **Dongshuai Li**, Baoyou Zhu, Jiuhou Lei. Polarity transitions of narrow bipolar events in thundercloud tops reaching the lower stratosphere. *Nat Commun* 15, 7344 (2024).
- 21) Feifan Liu, Gaopeng Lu, Torsten Neubert, Jiuhou Lei, Oliver Chanrion, Nikolai Østgaard, **Dongshuai Li**, Alejandro Luque, Francisco J Gordillo-Vázquez, Victor Reglero, Weitao Lyu, Baoyou Zhu. Optical emissions associated with narrow bipolar events from thunderstorm clouds penetrating into the stratosphere. *Nat Commun* 12, 6631 (2021).
- 22) Soler, S, Gordillo-Vázquez, FJ, Pérez-Invernón, FJ, Luque, A, **Li, Dongshuai**, Neubert, T, . . . Østgaard, N. (2022). Global distribution of key features of streamer corona discharges in thunderclouds. *Journal of Geophysical Research: Atmospheres*, e2022JD037535.
- 23) Husbjerg, Lasse Staining, Neubert, Torsten, Chanrion, Olivier, Dimitriadou, Krystallia, **Li, Dongshuai**, Stendel, Martin, . . . Reglero, Victor. (2022). Observations of blue corona discharges in thunderclouds. *Geophysical Research Letters*, 49(12), e2022GL099064.
- 24) Zhang, Hongbo, Lu, Gaopeng, Lyu, Fanchao, Xiong, Shaolin, Ahmad, Mohd Riduan, Yi, Qibin, **Li, Dongshuai**, . . . Liu, Feifan. (2021). On the Terrestrial Gamma-Ray Flashes Preceding Narrow Bipolar Events. *Geophysical Research Letters*, 48(8), e2020GL092160.

- 25) Soler, Sergio, Gordillo-Vázquez, Francisco J, Pérez-Invernón, FJ, Luque, Alejandro, **Li, Dongshuai**, Neubert, Torsten, . . . Østgaard, Nikolai. (2021). Global frequency and geographical distribution of nighttime streamer corona discharges (BLUEs) in thunderclouds. *Geophysical Research Letters*, 48(18), e2021GL094657.
- 26) Liu, Feifan, Lu, Gaopeng, Neubert, Torsten, Lei, Jiuhou, Chanrion, Oliver, Østgaard, Nikolai, **Li, Dongshuai**, . . . Reglero, Victor. (2021). Optical emissions associated with narrow bipolar events from thunderstorm clouds penetrating into the stratosphere. *Nature Communications*, 12(1), 6631.
- 27) Soler, S, Pérez-Invernón, Francisco J, Gordillo-Vázquez, FJ, Luque, Alejandro, **Li, Dongshuai**, Malagón-Romero, Alejandro, . . . Navarro-Gonzalez, J. (2020). Blue optical observations of narrow bipolar events by ASIM suggest corona streamer activity in thunderstorms. *Journal of Geophysical Research: Atmospheres*, 125(16), e2020JD032708.
- 28) Lyu, Fanchao, Yang, Jing, Zhu, Baoyou, **Li, Dongshuai**, Xiong, Shaoling, Liu, Feifan, . . . Zhang, Hongbo. (2020). Terrestrial gamma-ray flashes as the high-energy effect of tropospheric thunderstorms in near-Earth space. *SCIENTIA SINICA Physica, Mechanica & Astronomica*, 50(12), 129506.
- 29) Luque, Alejandro, Gordillo-Vázquez, Francisco José, **Li, Dongshuai**, Malagón-Romero, Alejandro, Pérez-Invernón, Francisco Javier, Schmalzried, Anthony, . . . Neubert, Torsten. (2020). Modeling lightning observations from space-based platforms (CloudScat. jl 1.0). *Geoscientific Model Development*, 13(11), 5549-5566.
- 30) Ren, Huan, Tian, Ye, Lu, Gaopeng, Zhang, Yunfeng, Fan, Yanfeng, Jiang, Rubin, Liu, Mingyuan, **Li, Dongshuai** . . . Qie, Xiushu. (2019). Examining the influence of current waveform on the lightning electromagnetic field at the altitude of halo formation. *Journal of Atmospheric and Solar-Terrestrial Physics*, 189, 114-122.
- 31) Mostajabi, Amirhossein, **Li, Dongshuai**, Azadifar, Mohammad, Rachidi, Farhad, Rubinstein, Marcos, Diendorfer, Gerhard, . . . Pavanello, Davide. (2019). Analysis of a bipolar upward lightning flash based on simultaneous records of currents and 380-km distant electric fields. *Electric Power Systems Research*, 174, 105845.
- 32) Li, Xiao, Lu, Gaopeng, Fan, Yanfeng, Jiang, Rubin, Zhang, Hongbo, **Li, Dongshuai**, . . . Ren, Huan. (2019). Underground measurement of magnetic field pulses during the early stage of rocket-triggered lightning. *Journal of Geophysical Research: Atmospheres*, 124(6), 3168-3179.
- 33) Ma, Lina, Li, Qing, Jiang, Sulin, Lei, Lianfa, **Li, Dongshuai**, & Wang, Zhenhui. (2018). Consistency Analysis of Experimental and Simulated Brightness Temperature based on Ground-based Microwave Radiometer and Cloud Detection (in Chinese). *Remote Sensing Technology and Application*, 33(1), 68-77.
- 34) Lu, Gaopeng, Cummer, Steven A, Chen, Alfred B, Lyu, Fanchao, **Li, Dongshuai**, Liu, Fei, . . . Su, Han-Tzong. (2017). Analysis of lightning strokes associated with sprites observed by ISUAL in the vicinity of North America. *TAO: Terrestrial, Atmospheric and Oceanic Sciences*, 28(4), 5.
- 35) Li, Qing, Lei, Lianfa, Wang, Zhenhui, Wei, Ming, & **Li, Dongshuai**. (2017). The Status of Lightning Thermal Effect Observation by Remote Sensing (in Chinese). *Advances in Earth Science*, 32(5), 481.
- 36) Yan, Fengfan, Zhang, Qilin, **Li, Dongshuai**, Gao, Jinge, & Shen, yuan. (2017a). Application and accuracy validation of the Cooray-Rubinstein formula for different soil conductivity (in English). *Transitions of Atmospheric Sciences*, 40(1):118-126.
- 37) Yan, Fengfan, Zhang, Qilin, **Li, Dongshuai**, Gao, Jinge, & Shen, yuan. (2017b). Application and accuracy validation of the Cooray-Rubinstein formula for different soil conductivity (in Chinese). *Transitions of Atmospheric Sciences*, 40(1):118-126.
- 38) Tang, Xiao, Zhang, Qilin, & **Li, Dongshuai**. (2015). Calculation and analysis of lightning induced overvoltage with stratified ground structure. *High Voltage Engineering*, 41(1), 84-93.

- 39) Paknahad, Javad, Sheshyekani, Keyhan, Hamzeh, Mohsen, **Li, Dongshuai**, & Rachidi, Farhad. (2015). The influence of the slope angle of the ocean–land mixed propagation path on the lightning electromagnetic fields. *IEEE Transactions on Electromagnetic Compatibility*, 57(5), 1086-1095.
- 40) Tang, Xiao, Zhang, Qilin, **Li, Dongshuai**, Zhang, Liang, & Gao, Jinge. (2015). Calculation and Analysis of Lightning Induced Overvoltage with Stratified Ground Structure (in Chinese). *High Voltage Engineering*, 41(1), 84-93.
- 41) Zhang, Qilin, Tang, Xiao, Gao, Jinge, Zhang, Liang, & **Li, Dongshuai**. (2013). The influence of the horizontally stratified conducting ground on the lightning-induced voltages. *IEEE Transactions on Electromagnetic Compatibility*, 56(2), 435-443.
- 42) Zhang, Qilin, Zhang, Yuanyuan, **Li, Dongshuai**, Fan, Yanfeng, & Gao, Jinge. (2013). Effect of irregular terrain on propagation of lightning electromagnetic field (in Chinese). *Journal of Meteorological Research*, 71(2), 357-365.
- 43) Ouyang, Shuang, Zhang, Qilin, Li, Ying, **Li, Dongshuai**, & Zhang, Yuanyuan. (2013). Impact on Lightning Electromagnetic Field Propagation of Soil Electrical Parameter Variation Induced by Varying Surface Soil Moisture (in Chinese). *Meteorological Science and Technology*, 40(6), 1018-1024.
- 44) Gao, Jinge, Zhang, Qilin, **Li, Dongshuai**, Zhang, Yuanyuan, & Fan, Yanfeng. (2013). Propagation effects of the rough surface on the lightning horizontal electric field (in Chinese). *Journal of the Meteorological Science*, 33(6), 627-633.
- 45) Zhang, Qilin, Yang, Jing, **Li, Dongshuai**, & Wang, Zhenhui. (2012). Propagation effects of a fractal rough ocean surface on the vertical electric field generated by lightning return strokes. *Journal of electrostatics*, 70(1), 54-59.
- 46) Zhang, Qilin, Yang, Jing, Jing, Xiaoqin, **Li, Dongshuai**, & Wang, Zhenhui. (2012). Propagation effect of a fractal rough ground boundary on the lightning-radiated vertical electric field. *Atmospheric research*, 104, 202-208.
- 47) Zhang, Qilin, Jing, Xiaoqin, Yang, Jing, **Li, Dongshuai**, & Tang, Xiao. (2012). Numerical simulation of the lightning electromagnetic fields along a rough and ocean-land mixed propagation path. *Journal of Geophysical Research: Atmospheres*, 117(D20).

Book chapters

- 1) **Li, Dongshuai (CA)**, Alejandro Luque, Farhad Rachidi, Marcos Rubinstein, 2022. Advanced Time Domain Modelling for Electrical Engineering - Chapter 11: The Application of The Finite-Difference Time-Domain (FDTD) Technique to Lightning Studies. *The Institution of Engineering and Technology (IET)*. ISBN: 9781839531538.
- 2) **Li, Dongshuai (CA)**, Alejandro Luque, Marcos Rubinstein, Farhad Rachidi, 2023. Lightning Electromagnetics, 2nd Edition - Chapter 10: Lightning interaction with the ionosphere. *The Institution of Engineering and Technology (IET)*. ISBN: 9781785615412.

Peer-reviewed articles published in conference proceedings

- 1) **Li, Dongshuai (CA)**, Torsten Neubert, Lasse Skaaning Husbjerg, Olivier Chanrion, ..., Víctor Reglero. (2024). Blue Corona Discharges Detected by ASIM. In Proceedings of the 37th International Conference on Lightning Protection (ICLP), Dresden, Germany.
- 2) **Li, Dongshuai (CA)**, Azadifar, Mohammad, Sunjerga, Antonio, Rachidi, Farhad, Rubinstein, Marcos, Luque, Alejandro, . . . Pichler, Hannes. (2022). Analysis of lightning electromagnetic field propagation over mountainous terrain using simultaneous records of current and its electric field at 380-km distance. Paper presented at the Proceedings of Global EM 2022, *Global Electromagnetics Conference*, Abu Dhabi, United Arab Emirates.
- 3) **Li, Dongshuai (CA)**, Rachidi, Farhad, & Rubinstein, Marcos. (2019). FDTD Modeling of lightning electromagnetic field propagation over mountainous terrain. Paper presented at *the 2019 International Applied Computational Electromagnetics Society Symposium (ACES)*, Miami (FL), USA.
- 4) **Li, Dongshuai (CA)**, Rubinstein, Marcos, Rachidi, Farhad, Diendorfer, Gerhard, & Schulz, Wolfgang. (2018). Analysis of location accuracy of ToA-based lightning location systems in mountainous terrain. Paper presented at *the XVI International Conference on Atmospheric Electricity*, Nara, Japan.
- 5) **Li, Dongshuai (CA)**, Rachidi, Farhad, Rubinstein, Marcos, Diendorfer, Gerhard, & Wang, Zhenhui. (2016). Location Accuracy Evaluation of ToA-Based Lightning Location Systems over Mountainous Terrain. Paper presented at *the International Lightning Detection Conference/International Lightning Meteorology Conference - ILDC/ILMC 2016*, San Diego, California, USA.
- 6) **Li, Dongshuai (CA)**, Paknahad, Javad, Rachidi, Farhad, Rubinstein, Marcos, Sheshyekani, Keyhan, Zhang, Qilin, & Wang, Z. (2015). Propagation effects on lightning magnetic fields over hilly and mountainous terrain. Paper presented at *the 2015 IEEE International Symposium on Electromagnetic Compatibility (EMC)*, Dresden, Germany.
- 7) Azadifar, Mohammad, **Li, Dongshuai**, Rubinstein, Marcos, & Rachidi, Farhad. (2017). A semi-analytical simplified approach to compute lightning radiated electric fields at long distances taking into account ionospheric reflection. Paper presented at *the 2017 XXXIIInd General Assembly and Scientific Symposium of the International Union of Radio Science (URSI GASS)*, Montreal, Quebec, Canada.
- 8) Azadifar, Mohammad, **Li, Dongshuai**, Rachidi, Farhad, Rubinstein, Marcos, Diendorfer, Gerhard, Pichler, Hannes, . . . Pavanello, Davide. (2016). Simultaneous Current and Distant Electric Field Waveforms from Upward Lightning: Effect of Ionospheric Reflection. Paper presented at *the 24th International Lightning Detection Conference (ILDC)*, San Diego, California.
- 9) Azadifar, Mohammad, **Li, Dongshuai**, Paolone, Mario, Pavanello, Davide, Rachidi, Farhad, & Rubinstein, Marcos. (2016). An update on the measurements of lightning currents and electromagnetic fields associated with flashes to the Säntis tower in Switzerland. Paper presented at *the Proceedings of International Colloquium on Lightning and Power Systems*, 27-29 June 2016, Bologna, Italy.
- 10) Ma, Lina, Li, Wang, Zhenhui, Qing, Jiang, Sulin, Lei, Lianfa, & **Li, Dongshuai** (2017). Consistency Analysis of Experimental and Simulated Brightness Temperature based on Ground-based Microwave Radiometer and Cloud Detection. Paper presented at *the 34th Chinese Meteorological Society*, Beijing, China.
- 11) Gao, Jing, Zhang, Qilin, **Li, Dongshuai**, Fan, Yanfeng, & Zhang, Yuanyuan. (2012). Propagation effects of the rough surface on the lightning horizontal electric field. Paper presented at *the 10th Lightning Protection and Disaster Mitigation Forum, Liaoning (S13)*, Shenyang, China.