

## **SELECTED RECENT PUBLICATIONS**

(as the Principal Author)

### **BOOKS:**

#### ***Books:***

**Albert Wang**, [\*Practical ESD Protection Design\*](#), IEEE-Wiley, New York, ISBN: 9781119850403, 2022 (available at [Amazon](#))

**Albert Wang**, *On-Chip ESD Protection for Integrated Circuits: an IC Design Perspective*, Kluwer/Springer, Boston, ISBN: 978-0792376477, 2002.

#### **Book Edited:**

J. Tang, Y. Li, H. Wu, B. Zhao and **Albert Wang**, *A Proceedings of IEEE Electron Devices Technology and Manufacturing (EDTM) Conference*, Edited, IEEE, ISBN: 978-1-7281-8176-9, 2021

## **SELECTED TOPICAL PUBLICARIONS**

### ***Journals:*** (My students in *Italic*)

- *C. Li, Z. Pan, X. Li, W. Hao, R. Miao and Albert Wang*, “Selective Overview of 3D Heterogeneity in CMOS”, *Nanomaterials* 2022, 12(14), 2340; July 2022.
- *Z. Pan, C. Li, W. Hao, X. Li and Albert Wang*, “ESD Protection Designs: Topical Overview and Perspective”, *IEEE Transactions on Device and Materials Reliability (TDMR)*, Vol. 22, No. 3, pp. 356-370, September 2022. DOI: [10.1109/TDMR.2022.3178420](#).
- *M. Di, Z. Pan, F. Zhang, C. Li, H. Wang and Albert Wang*, “A Study of ESD-mmWave-Switch Co-Design of 28GHz Distributed Travelling Wave Switch in 22nm FDSOI for 5G Systems”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 6, pp. 1290-1296, December 2021. DOI: [10.1109/JEDS.2021.3131109](#).
- *M. Di, Z. Pan, F. Zhang, C. Li, H. Wang and Albert Wang*, “A Study of ESD-mmWave-Switch Co-Design of 28GHz Distributed Travelling Wave Switch in 22nm FDSOI for 5G Systems”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 6, pp. 1290-1296, December 2021. DOI: [10.1109/JEDS.2021.3131109](#).
- *C. Li, M. Di, Z. Pan, F. Zhang, Q. Chen and Albert Wang*, “Investigating Graphene gNEMS ESD Switch for Design Optimization”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 9, pp. 1172-1180, October 2021. DOI: [10.1109/JEDS.2021.3121995](#).
- *C. Li, F. Zhang, C. Wang, Z. Pan, M. Di and Albert Wang*, “Analyze Scalable Sudoku-Type DTSCR ESD Protection Array Structures in 22nm FDSOI”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 9, pp. 1137-1144, September 2021. DOI: [10.1109/JEDS.2021.3110955](#).
- *M. Di, C. Li, Z. Pan and Albert Wang*, “Non-Pad-Based in Situ in-Operando CDM ESD Protection Using Internally Distributed Network”, *IEEE J. of Electron Devices*

*Society (J-EDS)*, Vol. 9, pp. 1248-1256, December 2021. DOI: [10.1109/JEDS.2021.3112736](https://doi.org/10.1109/JEDS.2021.3112736).

- C. Li, Q. Chen, J. Ng, M. Di, Z. Pan, T. Jones, Y-H. Xie, J. Hopkins, and **Albert Wang**, “Emerging graphene-based on-chip ESD protection”, **Invited** review paper, *AAAFM Materials*, pp. 86-91, August 2021, [doi:10.24911/AAAFMMat/7-241](https://doi.org/10.24911/AAAFMMat/7-241).
- M. Di, Z. Pan, C. Li and **Albert Wang**, “ESD Design Verification Aided by Mixed-Mode Multiple-Stimuli ESD Simulation”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 9, pp. 1194-1201, August 17, 2021, DOI: [10.1109/JEDS.2021.3105375](https://doi.org/10.1109/JEDS.2021.3105375)
- C. Li, Q. Chen, J. Ng, F. Zhang, H. Wang, M. Di, Z. Pan, T. Wu, K. Zhang, X. Xie, Y. Xie and **Albert Wang**, “Design, Fabrication and Characterization of Single-Crystalline Graphene gNEMS ESD Switches for Future ICs”, *IEEE Transactions on Device and Materials Reliability (TDMR)*, Vol. 21, No. 3, pp. 331-337, Sept. 2021, DOI: [10.1109/TDMR.2021.3090311](https://doi.org/10.1109/TDMR.2021.3090311).
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- Z. Pan, C. Li, M. Di, F. Zhang and **Albert Wang**, “3D TCAD Analysis Enabling ESD Layout Design Optimization”, *IEEE J. of Electron Devices Society (J-EDS)*, Vol. 8, pp. 1289-1296, September 28, 2020. DOI: [10.1109/JEDS.2020.3027034](https://doi.org/10.1109/JEDS.2020.3027034)
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