Publications —

Book Chapter

B1 Y. Wang, Z. Zhang, J. E. Bowers, and K.-T. Cheng, "Silicon photonics optical interconnects for data-centric artificial intelligence applications: A design automation perspective," in *Frontiers of Electronic Design (FED)*, A. Iranmanesh, Ed., in press, Cham: Springer International Publishing.

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- J2 A. James, A. Rizzo, **Y. Wang**, A. Novick, S. Wang, R. Parsons, K. Jang, M. Hattink, and K. Bergman, "Process Variation-Aware Compact Model of Strip Waveguides for Photonic Circuit Simulation," *Journal of Lightwave Technology*, pp. 1–14, 2023. 109/JLT.2023.3238847.
- J3 A. Novick, A. James, L. Y. Dai, Z. Wu, A. Rizzo, S. Wang, Y. Wang, M. Hattink, V. Gopal, K. Jang, R. Parsons, and K. Bergman, "High-bandwidth density silicon photonic resonators for energy-efficient optical interconnects," *Applied Physics Reviews*, vol. 10, no. 4, p. 041 306, Nov. 2023.
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- C₃ Z. Wu, R. Parsons, S. Wang, Y. Wang, and K. Bergman, "Wavelength reconfigurable transceiver for multi-interface compute accelerator networks," in *Optical Fiber Communication Conference (OFC) 2024*, to appear, Optica Publishing Group, 2024.
- C4 G. Michelogiannakis, Y. Arafa, B. Cook, L. Y. Dai, A.-H. Hameed Badawy, M. Glick, Y. Wang, K. Bergman, and J. Shalf, "Efficient Intra-Rack Resource Disaggregation for HPC Using Co-Packaged DWDM Photonics," in 2023 IEEE International Conference on Cluster Computing (CLUSTER), Santa Fe, NM, USA: IEEE, Oct. 2023, pp. 158–172. 10.1109/CLUSTER52292.2023.00021.
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- C6 Y. Wang, S. Wang, A. Novick, A. James, R. Parsons, A. Rizzo, and K. Bergman, "Dispersion-Engineered and Fabrication-Robust SOI Waveguides for Ultra-Broadband DWDM," en, in *Optical Fiber Communication Conference (OFC) 2023*, San Diego California: Optica Publishing Group, 2023, Th3A.4.
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- C9 Y. Wang, J. Hulme, P. Sun, M. Jain, M. A. Seyedi, M. Fiorentino, R. G. Beausoleil, and K.-T. Cheng, "Characterization and Applications of Spatial Variation Models for Silicon Microring-Based Optical Transceivers," in 2020 57th ACM/IEEE Design Automation Conference (DAC), San Francisco, CA, USA: IEEE, Jul. 2020, pp. 1–6. 10.1109/DAC18072.2020.9218608.
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- C14 R. Wu, Y. Wang, Z. Zhang, C. Zhang, C. L. Schow, J. E. Bowers, and K.-T. Cheng, "Compact modeling and circuit-level simulation of silicon nanophotonic interconnects," in *Design, Automation & Test in Europe Conference & Exhibition (DATE), 2017*, Lausanne, Switzerland: IEEE, Mar. 2017, pp. 602–605. 10.23919/DATE.2017.7927057.
- C15 A. Ghofrani, M. A. Lastras-Montaño, **Y. Wang**, and K.-T. Cheng, "In-place Repair for Resistive Memories Utilizing Complementary Resistive Switches," in *Proceedings of the 2016 International Symposium on Low Power Electronics and Design*, San Francisco Airport CA USA: ACM, Aug. 2016, pp. 350–355. © 10.1145/2934583.2934590.
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- I3 Y. Wang, L. Shao, M. A. Lastras-Montano, and K.-T. Cheng, "Taming Emerging Devices' Variation and Reliability Challenges with Architectural and System Solutions [Invited]," in 2019 IEEE 32nd International Conference on Microelectronic Test Structures (ICMTS), Kita-Kyushu City, Fukuoka, Japan: IEEE, Mar. 2019, pp. 90–95. 10.1109/ICMTS.2019.8730924.

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YUYANG WANG PUBLICATION LIST $\frac{2}{2}$