

A4.7 (C. Koos/ N. Lindenmann)

[A4.7:1] * N. Lindenmann, G. Balthasar, D. Hillerkuss, R. Schmogrow, M. Jordan, J. Leuthold, W. Freude, and C. Koos, *Photonic wire bonding: a novel concept for chip-scale interconnects*, Opt. Express **20**, 17667 (2012)

Subproject A4.7 Invited Talks at International Conferences and Workshops (2010-2014)

C. Koos, W. Freude, J. Leuthold, N. Lindenmann, S. Koeber, J. Hoffmann, T. Hoose, P. Huebner, M. Billah, *Photonic wire bonding: An enabling technology for heterogeneous multi-chip integration*, Proc. OSA Integrated Photonics Research, Silicon and Nanophotonics (IPR'13), Rio Grande, Puerto Rico, USA, Paper IM4A.3; July 14–17, 2013

C. Koos, J. Leuthold, W. Freude, N. Lindenmann, S. Koeber, J. Hoffmann, T. Hoose, P. Huebner, *Photonic wire bonding: Nanophotonic interconnects fabricated by direct-write 3D lithography*, Proc. 15th Intern. Conf. on Transparent Optical Networks (ICTON'13), Cartagena, Spain, Paper We.C2.4, June 23–27, 2013

C. Koos, J. Leuthold, W. Freude, N. Lindenmann, S. Koeber, G. Balthasar, J. Hoffmann, T. Hoose, P. Huebner, D. Hillerkuss, R. Schmogrow, *Photonic wire bonding: Connecting nanophotonic circuits across chip boundaries*, Proc. SPIE 8613, Advanced Fabrication Technologies for Micro/Nano Optics and Photonics VI, San Francisco (CA), USA, paper 8613-31, Feb. 2-7, 2013

C. Koos, J. Leuthold, W. Freude, L. Alloatti, D. Korn, N. Lindenmann, R. Palmer, J. Pfeifle, D. Hillerkuss, R. Schmogrow, *Silicon Nanophotonics and Photonic Wire Bonding: Technologies for Terabit/s Interconnects*, 6th ITG Workshop on Photonic Integration, Laser Optics Berlin, March 20, 2012

N. Lindenmann, G. Balthasar, J. Leuthold, W. Freude, C. Koos, Broadband low-loss interconnects enabled by photonic wire bonding, Optical Interconnects Conference (OI12), Santa Fe, New Mexico, USA, May 2012, Paper WC1

C. Koos, J. Leuthold, W. Freude, L. Alloatti, D. Korn, R. Palmer, M. Lauermann, N. Lindenmann, S. Koeber, J. Pfeifle, P. Schindler, D. Hillerkuss, R. Schmogrow, *Silicon-Organic Hybrid Integration and Photonic Wire Bonding: Technologies for Terabit/s Interconnects*, Joint Symposium on Opto- and Microelectronic Devices and Circuits (SODC 2012), Hangzhou, China, Sept. 24 - 27, 2012

N. Lindenmann, I. Kaiser, G. Balthasar, R. Bonk, D. Hillerkuss, W. Freude, J. Leuthold, C. Koos, *Photonic Waveguide Bonds – A Novel Concept for Chip-to-Chip Interconnects*, Proc. Optical Fiber Communication Conference (OFC11), Los Angeles (CA), USA, March 6 – 10, 2011, paper PDPC1 (**post-deadline paper**)

C. Koos, *Silicon Nanophotonics and Photonic Wire Bonding: Technologies for Terabit/s Interconnects*, Seminar talk at the University of Posts and Telecommunications, Nanjing, China, Sept. 28, 2012

C. Koos, *Silicon-organic hybrid integration, photonic wire bonding, and frequency combs: Technologies for Tbit/s interconnects*, Colloquium of the Inter-University Research School on Communication Technologies, Basic Research and Applications (COBRA), Eindhoven University, The Netherlands, Oct. 12, 2012

N. Lindenmann, G. Balthasar, T. Hoose, J. Hoffmann, P. Hübner, W. Freude, J. Leuthold, C. Koos, *Photonic Wire Bonds for Broadband Low-Loss Chip-to-Chip Interconnects*, 6. Workshop Optische Technologien, Hannover, November 2012

C. Koos, J. Leuthold, W. Freude, N. Lindenmann, S. Koeber, G. Balthasar, J. Hoffmann, T. Hoose, P. Huebner, D. Hillerkuss, R. Schmogrow, *Photonic wire bonding: Connecting nanophotonic circuits across chip boundaries*, MOEMS-MEMS SPIE Photonics West (MOEMS-MEMS-SPIE12), San Francisco (CA), USA, Feb. 2-7, 2013, paper 8613-31

C. Koos, J. Leuthold, W. Freude, L. Alloatti, D. Korn, R. Palmer, M. Laueremann, J. Pfeifle, N. Lindenmann, S. Koeber, D. Hillerkuss, R. Schmogrow, *Silicon photonics, hybrid integration and photonic wire bonding – enablers for energy-efficient terabit/s interconnects*, 13th FIBER OPTICS EXPO Technical Conference, Tokyo, Japan, April 10-12, 2013

C. Koos, J. Leuthold, W. Freude, N. Lindenmann, S. Koeber, J. Hoffmann, T. Hoose, P. Huebner, *Photonic wire bonding: Nanophotonic interconnects fabricated by direct-write 3D lithography*, Intern. Conf. on Transparent Optical Networks (ICTON13), Cartagena, Spain, June 23 -27, 2013

C. Koos, J. Leuthold, W. Freude, L. Alloatti, D. Korn, R. Palmer, M. Laueremann, J. Pfeifle, N. Lindenmann, S. Koeber, D. Hillerkuss, R. Schmogrow, *Silicon-organic hybrid integration, photonic wire bonding, and frequency combs: Technologies for multi-Terabit/s interconnects*, International Nano-Optoelectronics Workshop (iNOW13), Cargèse, Corsica, August 19 -30, 2013,