Next Generation of Silicon Photonics

The high power of photonic elements is now impeding the scalability of silicon photonic-based platforms. We show approaches based on novel materials, as well novel multiplexing approaches that alleviate this scalability challenge and enable large scale silicon photonic systems.

Bio

Prof. Michal Lipson is the Eugene Higgins Professor of Electrical Engineering and Professor of Applied Physics at Columbia University. She completed her B.S., MS and Ph.D. degrees in Physics at the Technion in 1998 and a Postdoctoral work at MIT in 2001.

Lipson pioneered the field of Silicon Photonics, which today is recognized as critical for scaling computing, and is the inventor of over 30 issued patents in this area. She is a member of the National Academy of Sciences. She was also awarded the NAS Comstock Prize in Physics, the MacArthur Fellowship, the Blavatnik Award, the Optical Society’s R. W. Wood Prize, the IEEE Photonics Award. Since 2014 every year she has been named by Thomson Reuters as a top 1% highly cited researcher in the field of Physics.

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Hosted by Chris Van de Walle.