

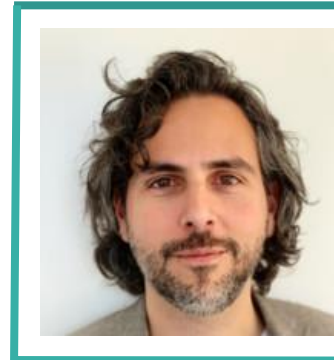


Σ Ε Μ Ι Ν Α Ρ Ι Ο

Low loss integrated Silicon Nitride Photonics Platform

Δευτέρα 31/05/2021, 15:30-17:00

<https://authgr.zoom.us/j/98530118581>



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ABSTRACT : The minimisation of optical losses in Photonic Integrated Circuits is a key parameter for enhanced performance of the devices in almost all application areas. The talk will give an overview of how such low loss PICs can be manufactured, what technologies are needed, what is the process variation for such technologies and finally how the required process modules can be matched to the various targeted applications. Furthermore, the presentation will show application examples in Quantum, LiDAR and sensing, where low loss light propagation in the PIC is very crucial for the demonstration of high performance functionality.

SHORT CV : Michael Zervas (Managing Director) studied physics and engineering at National Technical University of Athens, Greece and he obtained an MSc degree in integrated technologies from Polito/INPG/EPFL. After his MSc he joined IBM Oerlikon group in Zurich and Singapore, where he completed his management training program and led a team across Asia in operations for strategic sourcing. He returned to Switzerland for his PhD at EPFL in Lausanne working together with IBM research Zurich advancing the through silicon VIA technology. After his PhD he joined Intel in Ireland, working on the 14nm node development. In 2014 he joined the laboratory of Prof. Kippenberg at EPFL in Lausanne, where he developed the all nitride core technology with a focus on commercial spin-off and was involved in several international research projects in areas of piezo integration, LiNbO₃ integration and mid-IR nitride photonic circuits. In 2016, he co-founded LIGENTEC and brought the company to the international stage of photonic integration focusing. LIGENTEC now is among the worldwide pioneers on low loss Si₃N₄ based Photonic Integrated Circuits with customers from various fields in Quantum Computing, Biosensing, LIDARS, and Satellite based Interconnects.