

Dr. Georg Pucker is the head of the Advanced Materials and Photonic Structures research unit within the Center of Materials and Microsystems, Fondazione Bruno Kessler, Trento. He obtained his Doctoral degree in Technical Chemistry from the Technical University in Graz in 1996. Since 2001, he is researcher at the Center for Materials and Microsystems of FBK. His research in FBK ranges from silicon radiation detectors, solar cells, heterointegration of materials to silicon platforms and to integrated silicon photonics. The research in silicon photonic foccuses on the realisation of optical circuits and on the study of non-linear optical properties of silicon and silicon compatible materials. He has contributed to several projects of the European community, namely Esprit Project 28741 – SMILE (Silicon Modules for Integrated Light Engineering); Nemo (Nano based capsule-Endoscopy with molecular imaging and optical biopsy) FP6-37362 STREP; FP6-37026 Anna (European Integrated Activity of Excellence and Networking for Nano and Micro- Electronics Analysis FP6-37026, and FP7-Symphony (Integrated SYstem based on PHOtonic Microresonators and Microfluidic Components) and was the principal investigator of FBK for the project LIMA (Improve Photovoltaic efficiency by applying novel effects at the limits of light to matter interaction, FP7-248909). Currently, he is the principal investigator of FBK of the project Siquro (On silicon chip quantum optics for quantum computing and secure communications) financed by the Autonomous Province of Trento. He is author or co-author of more than 80 peer reviewed publications, author of a book chapter and inventor of 3 patents.