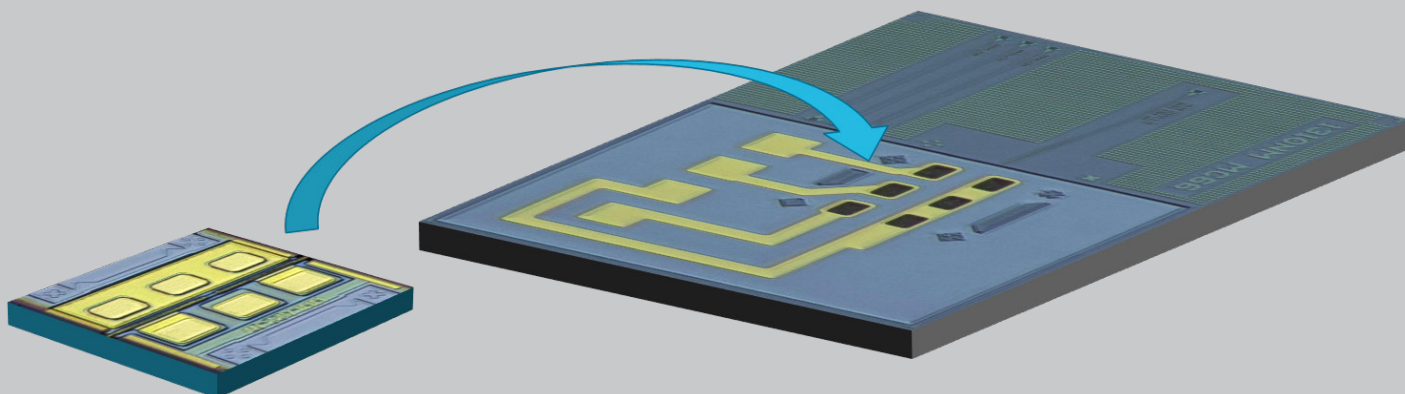


INP-EMITTERS FOR HYBRID INTEGRATION



AT A GLANCE

InP light sources for
application in photonic
multi-chip approaches



Features

- flip-chip configuration
- horizontal and vertical integration (2D and 3D)
- integrated taper for low optical coupling loss & relaxed alignment tolerance
- lateral & vertical positioning
- etched facets on request
- flexible adaption of devices corresponding to customer's photonic platforms

Application

- Telecom/Datacom
- Sensors

Photonic platforms

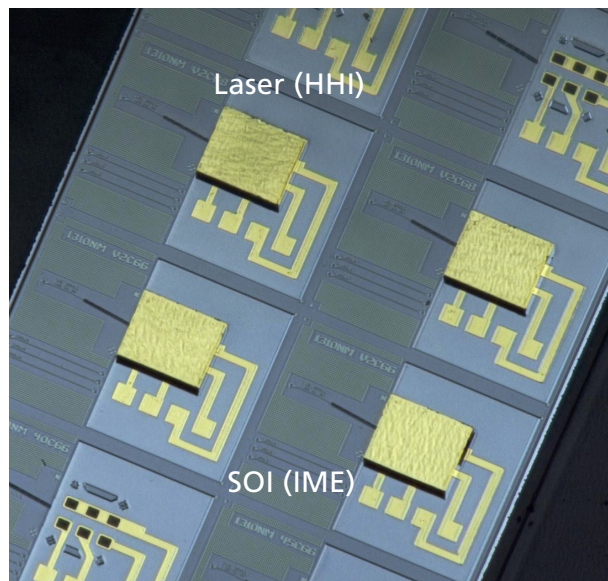
- Silicon on Insulator (SOI)
- Silicon-Nitride (SiN)
- Lithium Niobate-On-Insulator (LNOI)
- Glass
- Polymer

Functionality

- high power DFB-lasers
- high power gain chips
- high speed gain chips
- semiconductor optical amplifiers
- (SOAs)

Configuration

- horizontal and vertical emitters
- single chips and array



Example: Tolerant low-loss-butt-joint coupling of InP chip to SOI-waveguide



Dr. Martin Möhrle

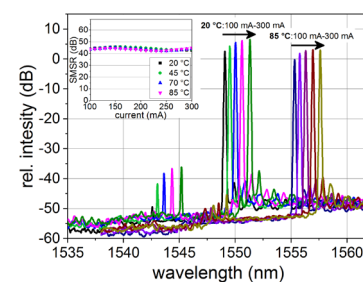
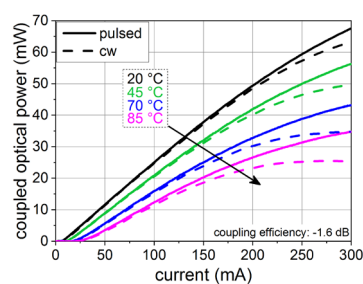
InP and RF

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Power coupled to SiN-waveguide and optical spectra for flip-chip integrated DFB laser