

Business Carrier: Optical Sensor

- The Young Interferometer and/or MZI based optical sensor is integrated in glass as well as silicon with on top a microfluidic structure for transporting liquids or gasses to the sensor surface.
- The combination of optical and microfluidic sensor is favourable since very sensitive devices can be created.
- These devices can be used as sensing elements for environmental monitoring, security (homeland defence) as well as in analytical instruments for industrial process control etc.
- The optical sensor contains silicon ($\text{SiO}_2/\text{Si}_3\text{N}_4$) based waveguiding layer for the transportation of the optical signals. The glass based microfluidic wafer contains the structures for transporting the fluids.
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