Micro-fabricated all optical pressure sensors - DTU Orbit (29/12/2018)

**Micro-fabricated all optical pressure sensors**

Optical pressure sensors can operate in certain harsh application areas where the electrical pressure sensors cannot. However, the sensitivity is often not as good for the optical sensors. This work presents an all optical pressure sensor, which is fabricated by micro fabrication techniques, where the sensitivity can be tuned in the fabrication process. The developed sensor design, simplifies the fabrication process leading to a lower fabrication cost, which can make the all optical pressure sensors more competitive towards their electrical counterpart. The sensor has shown promising results and a linear pressure response has been measured with a sensitivity of 0.6nm/bar.

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