

**mapsi**  
**photonics**

## THERMAL CAMERAS



## INFRARED FILTERS



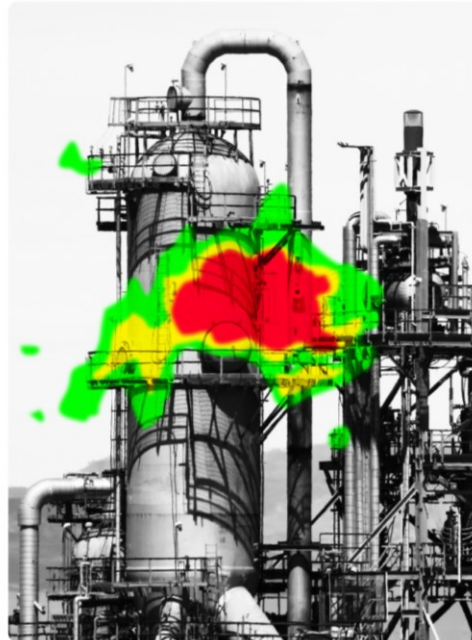
## GAS SENSORS



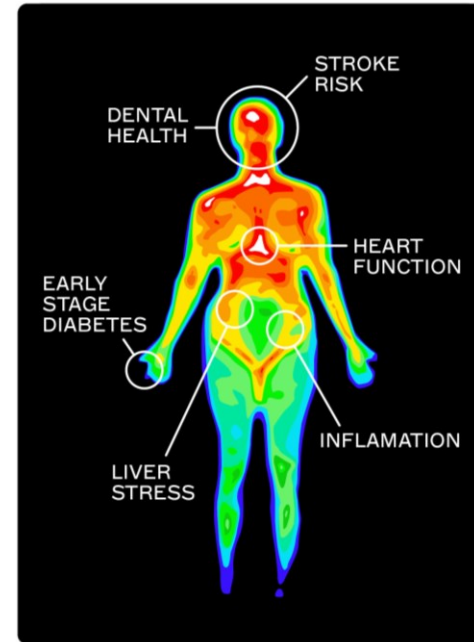
For mainstream applications in the **infrared** and **THz**:



INDUSTRIAL MONITORING

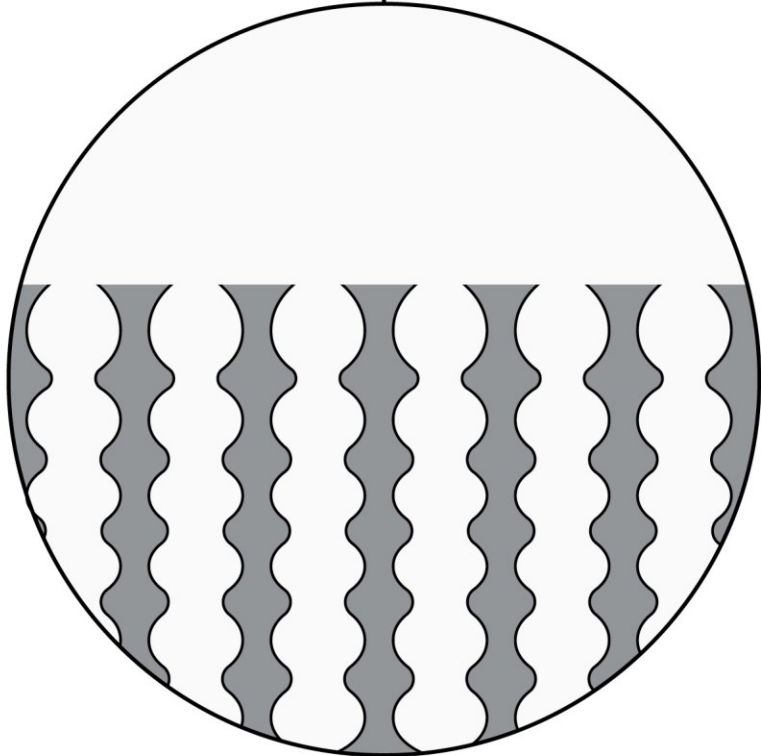


GAS LEAK DETECTION



THERMOGAPHY

# Our macroporous silicon filters



Adress the 4 main problems

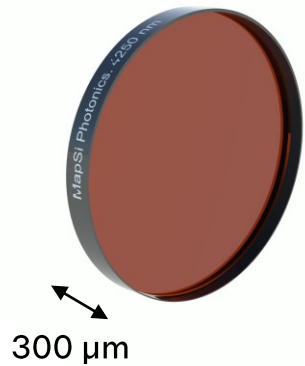
- 1 x2 Resolution  
LAYERLESS technology  
100% silicon
- 2 More resistant to harsh environments  
Silicon melts at 1200 °C and does not change its properties in humid environments
- 3 Smart & Test production  
Only 3 hours to manufacture a filter. We adjust to customers demand: no extra stocks
- 4 Cleaner production  
We reduce more than 75% of the CO2 released into the environment

# Benefits of our technology

**Typical applications** → We are more versatile, we adapt better to the clients needs

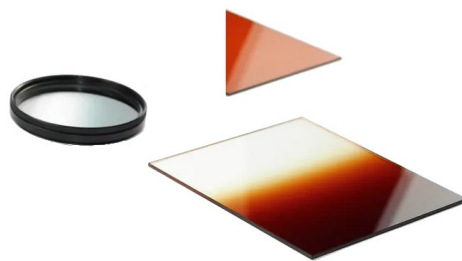
## Thinner filters

- Simplify the design of the device
- Reduce the solid angle variations



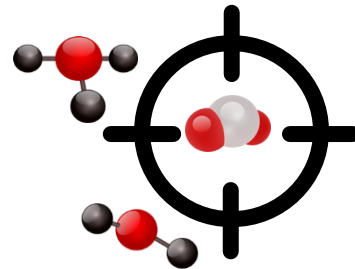
## Any shape

- Enables flexible designs more optical



## Unexplored wavelengths

- Best optical performances in [6-25] μm region

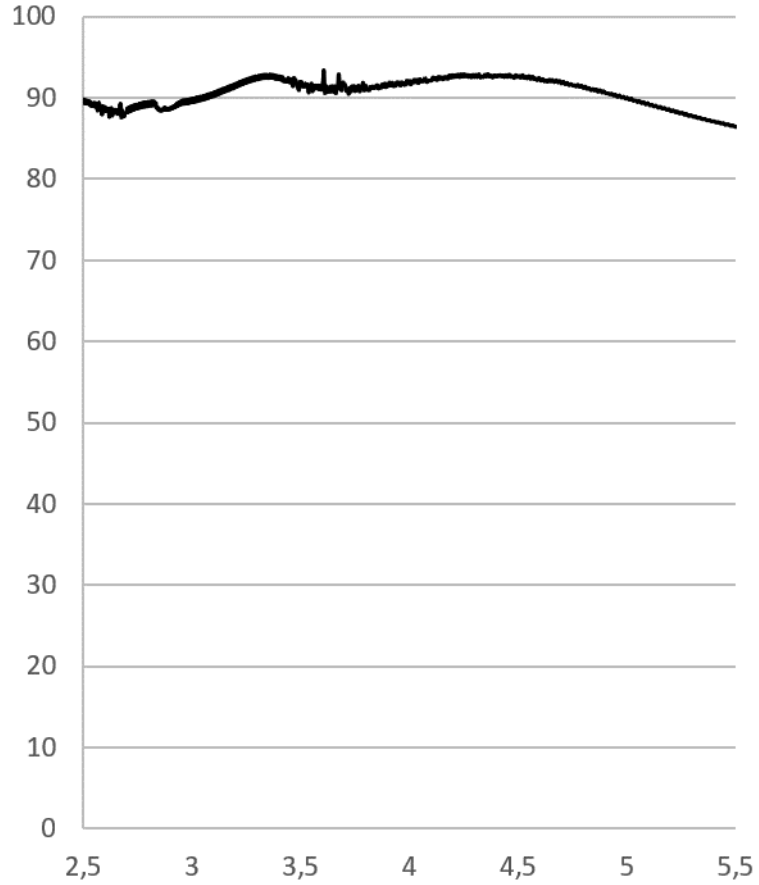


## Save money

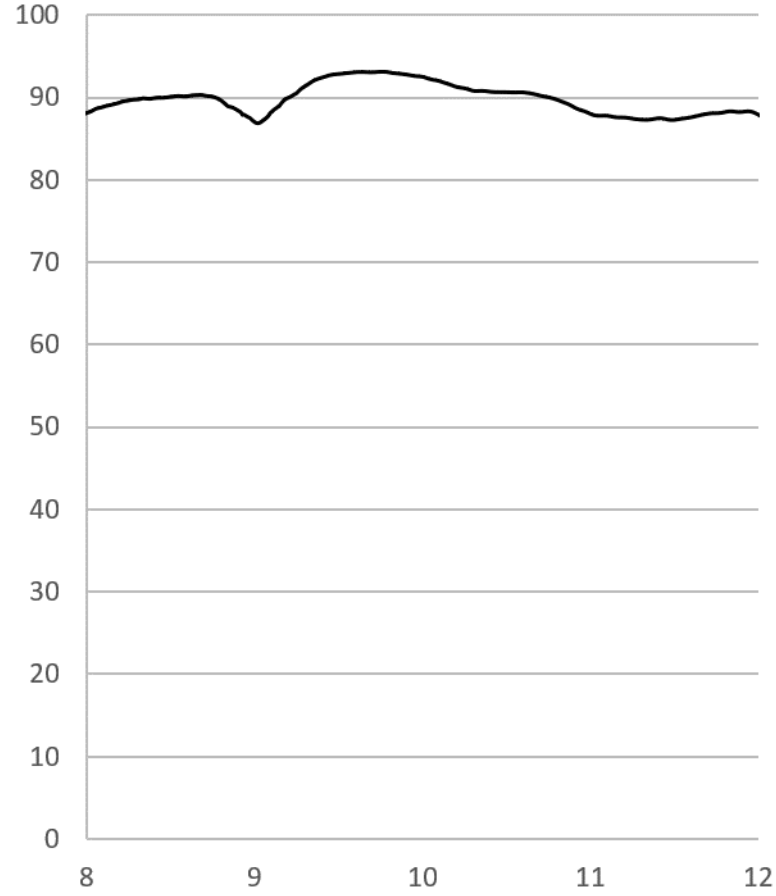
- Just pay for the number of filters you need, not for the whole batch

# Products: Windows

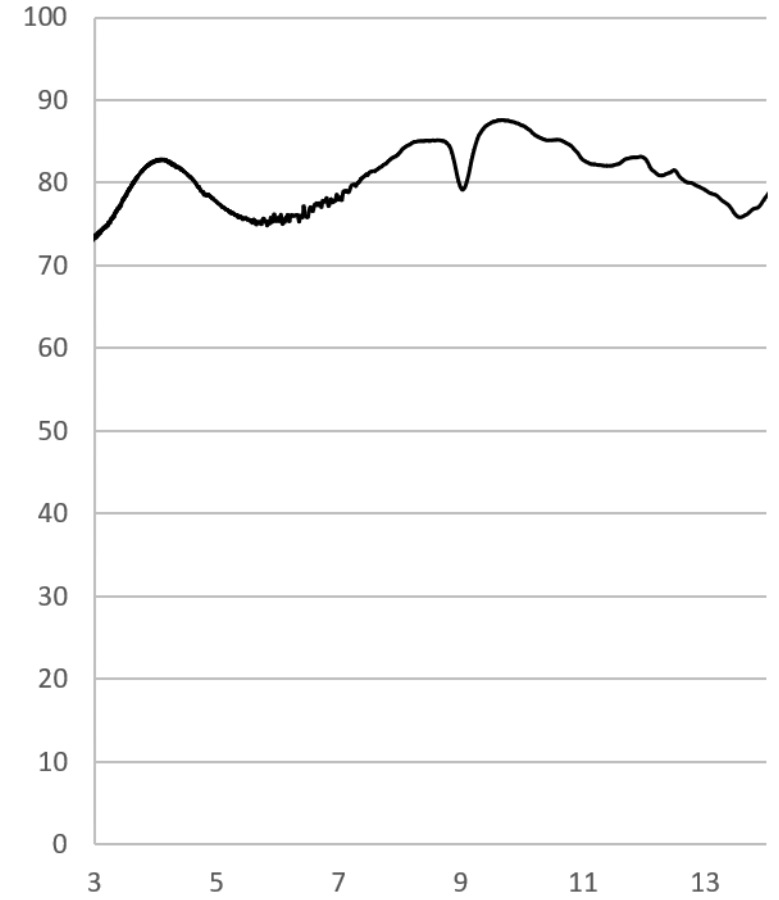
## 3-5 $\mu\text{m}$



## 8-12 $\mu\text{m}$

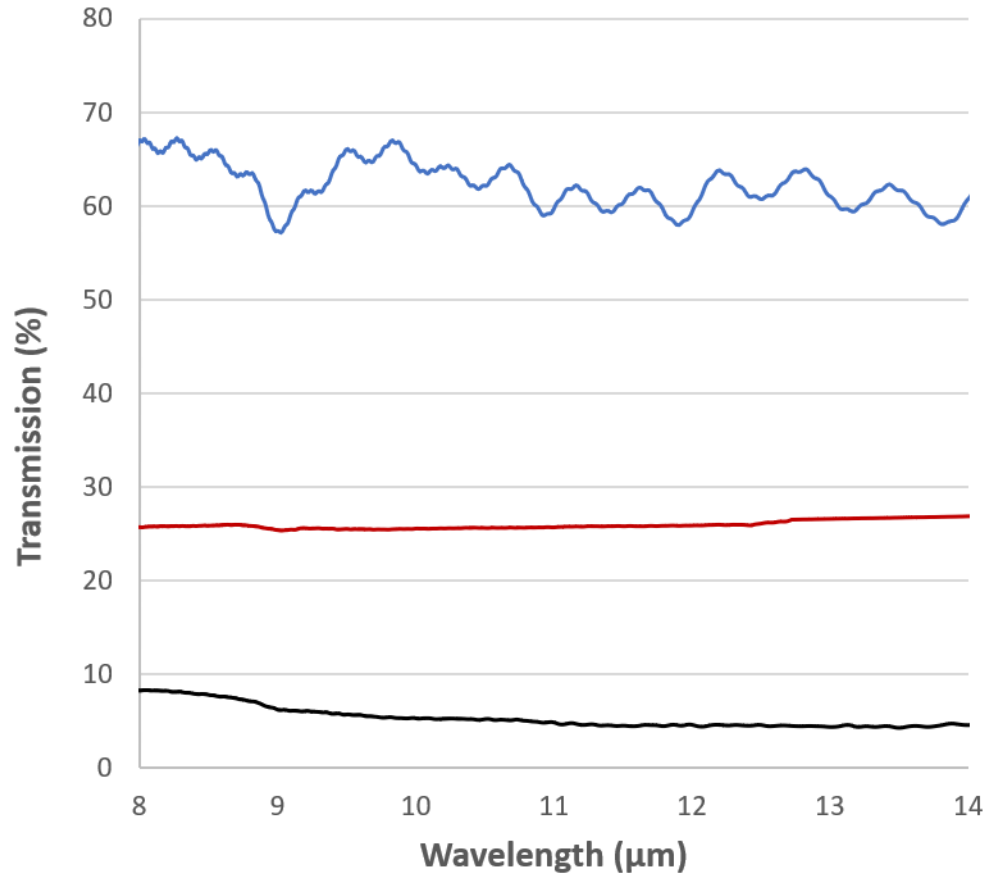


## 3-14 $\mu\text{m}$

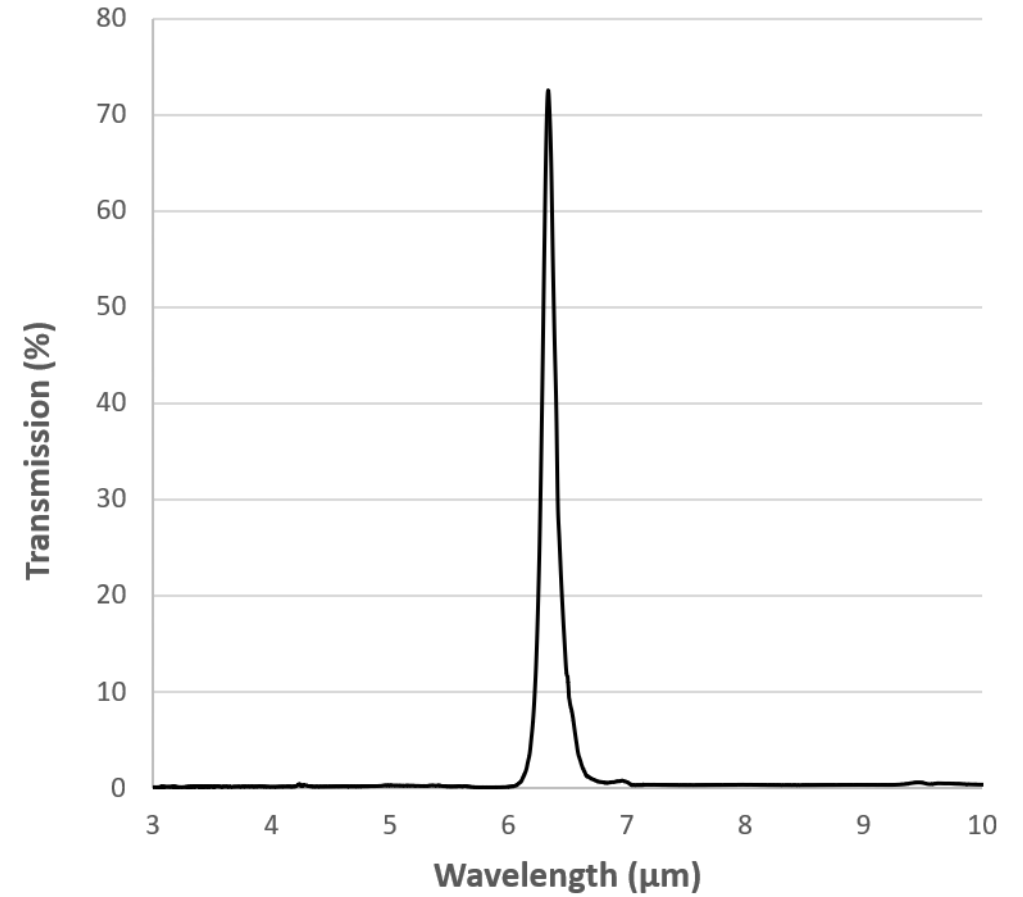


# Products

## Neutral Density Filters



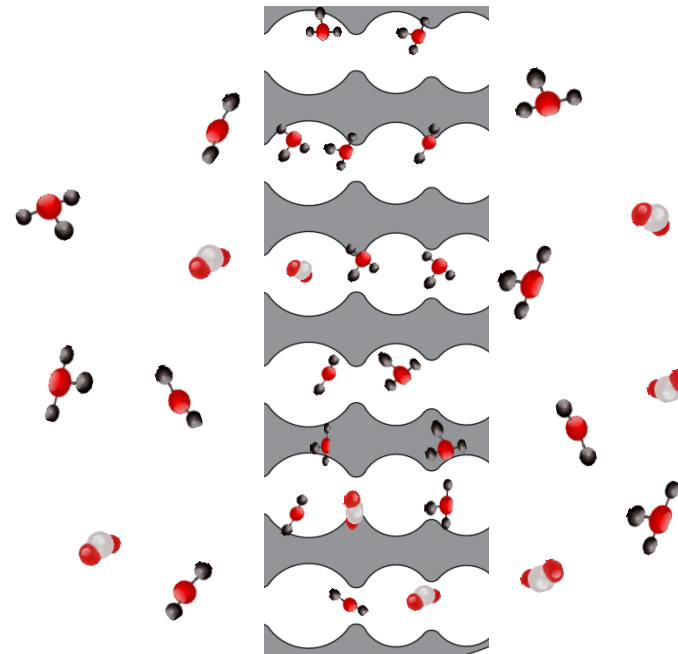
## Narrow Bandpass Filters



# Benefits of our technology

**Filters for enhanced detection (gas sensing)** → disruptive applications only enabled thanks to our technology

- Fluid goes inside pores
- Enhanced interaction between molecules and light because internal reflections/transmissions
- Higher sensibility
- Experimental áreas: biosensing

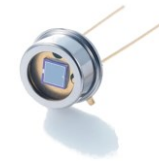


# Benefits of our technology

**New product lines** → macroporous silicon selective emitters and detectors

## Selective thermal emitters

- Market opportunity:
  - Only broadband thermal emitters
  - High emissivity
  - 5 email contacts last 3 months
- Launch time: 2025





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