

## Application fields

### Electromobility

- Monitoring of magnetic fields in air gaps
- E-cars, E-bikes
- Wind turbines, big electrical machines
- Magnetic bearing systems
- High precision machining tools

### Building safety and security

- Smart home applications

### Interactive consumer electronics

- Printed electromagnetic switches
- Wearable electronics
- Augmented and virtual reality
- Smart textile

### Soft robotics

- Active control of soft actuators

### Fluid analytics

- Process automation
- Sensor integration
- Customized fluidic components
- Continuous flow and droplet fluidics
- Assessment of food and liquid quality

## We Bring Your Ideas in Use!

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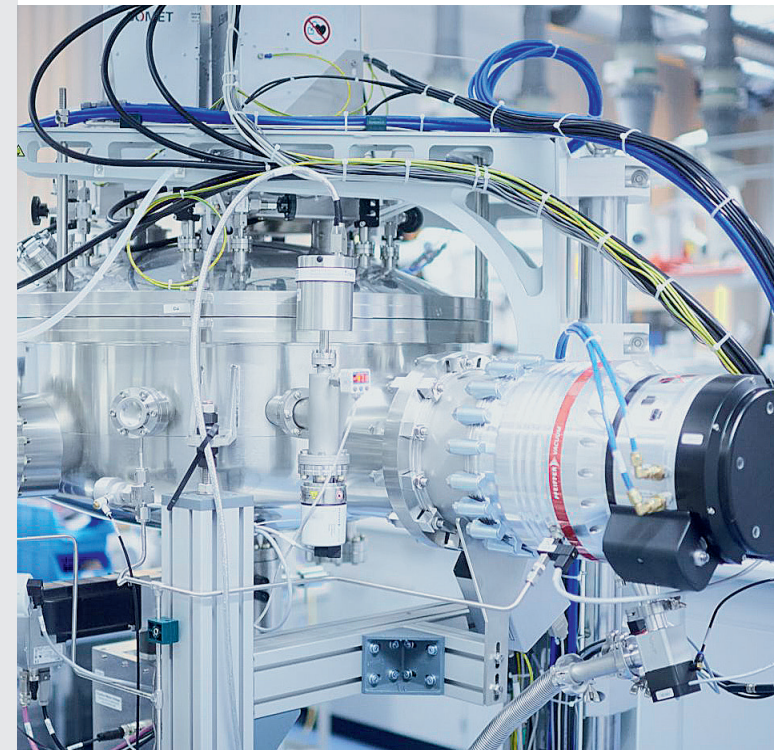
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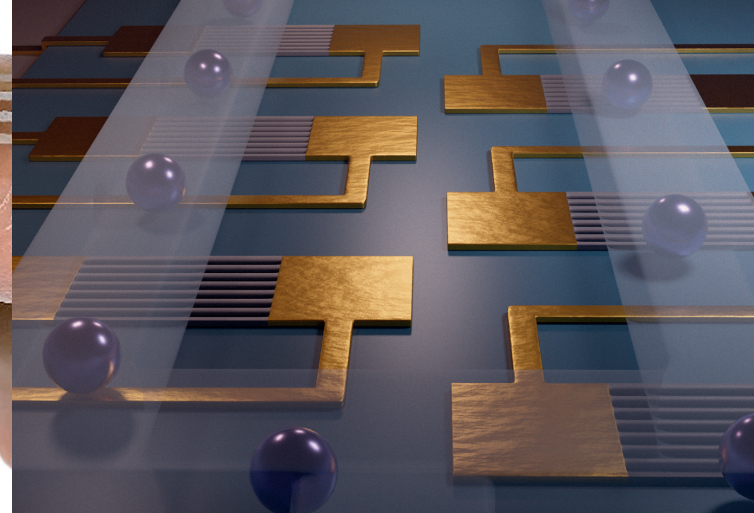
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## Smart sensor solutions



## Flexible magnetic field sensors

- Flexible sensors are on polymeric substrates with a thickness from 1  $\mu\text{m}$  to 100  $\mu\text{m}$
- Sensors can be processed on a sample area up to 12" wafer size
- Fully customized sensor layout
- Sensors mechanically bendable below 1 mm bending radii
- Stable electrical properties upon mechanical deformations

## Printable magnetic field sensors

- Different rigid and flexible substrates (paper, ceramic, silicon, textile, polymers)
- Substrate thickness from 1  $\mu\text{m}$
- Tunable sensitivity to magnetic field in the range from 0.5 mT to 200 mT
- Temperature sensor stability up to 90 °C
- Sensors mechanically bendable below 1 mm bending radii
- Fully customized sensor layout

## Fluidic analytic systems

- Non-invasive droplet detection in small tubes (diameter of 500  $\mu\text{m}$  and smaller)
- Monitoring droplets, rapid screening of various substances
- Optical, magnetic and impedance detection of different analytes
- Not invasive flow monitoring and flow adjustment via feedback system
- Stand-alone detection system

### YOUR BENEFIT

- Flexible and very thin substrates >1  $\mu\text{m}$
- Mechanically conformal to flat and curved objects
- Printable on different substrates
- Customized sensor design

### OUR OFFER

- Rigid, flexible and printable sensors
- Magnetosensitive powder
- Large area optical lithography and depositions
- Structural and magnetic characterization

### COOPERATION

- Production and vendor of powder for printed magnetic field sensors
- Technology licensing
- Joint development of sensors, powder and pastes