

SESSION 2.6 - NANOTECHNOLOGIES FOR INDUSTRY 4.0

Invited speech - NANOWIRE TECHNOLOGY FOR SENSING APPLICATIONS

Inorganic nanowires grown either by vapor-liquid-solid or vapor-solid-solid synthesis look very promising as building blocks for sensors and other electronic devices, especially in the fields of chemistry and life sciences, biological and analytical applications. This contribution reports on enabling technologies and related devices developed in our institution. They span from bottom-up growth to transfer and alignment, from in-place growth to surface coating with nanodiamond films. These yield a facile and efficient nanowire device fabrication, thus easing the construction of nanosensors and sensor arrays with improved sensitivity for chemical and biological signals during extra- and intracellular measurements.

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