

FROM RESEARCH TO INDUSTRY

cea tech

## BOOST YOUR R&D WITH CEA TECH TECHNOLOGY PLATFORMS

Skilled scientists, engineers, and technicians plus the latest in advanced software and equipment to speed innovation

### CHALLENGES FOR INDUSTRY AND SOCIETY



#### Healthcare and the silver economy

Diagnostics, imaging, clinical testing, therapies, rehabilitation, wellness, medical systems, e-healthcare



#### The factory of the future

Productivity, reliability, continuous design and quality improvement, non-destructive testing, ergonomics and training, flexibility, adaptability

#### CEA Tech technology platforms



#### Renewable energy

Energy production (biomass, PV, hydrogen), transportation, aerospace, residential, mobile devices, energy storage, energy grids, energy efficiency, waste recovery and recycling



#### Materials and characterization

Synthesis, assembly, recycling, lifecycle analysis, rare-materials management, lightweight structures, materials efficiency



#### Information and communication technologies and information processing

Semiconductors, telecommunications, cloud computing, supercomputers, digital services, cybersecurity, the internet of things, embedded systems (transportation, security, aerospace), ambient intelligence



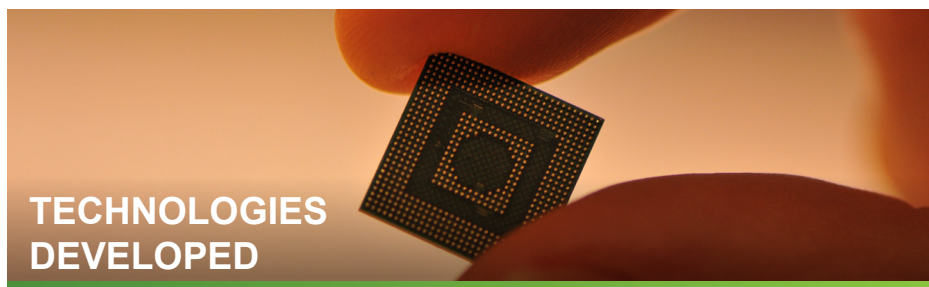
### CEA Tech offers 25+ technology platforms:

- Average annual investment in new equipment and resources: €120 million
- More than 300 joint R&D contracts with manufacturing companies
- More than 4,000 employees
- Guaranteed confidentiality for your projects and data

CEA Tech technology platforms can boost your R&D in the following areas:



## CEA TECH TECHNOLOGY PLATFORM



## TECHNOLOGIES DEVELOPED

### ***Nanoelectronics and micro- and nanosystems***

Substrates (200 mm and 300 mm), transistors, photonics-on-silicon, 3D integration, MEMS (accelerometers, gyrometers), CPV cells, power components

### ***Integrated circuit and embedded systems design***

Hardware and software architectures (power consumption, real-time constraints), systems-on-chip

### ***Powder metallurgy and recycling***

Lifecycle analysis, magnets, powder-injection assembly, materials efficiency, lightweight structures

### ***Nanocharacterization***

Physico-chemical analysis (XPS, SIMS), morphological analysis (SEM, TEM), sample preparation

### ***Photovoltaic solar***

Materials (silicon), high-yield cells, organic cells, modules, systems integration, testing

### ***Smart-grid systems***

RES integration, stationary storage, charging systems for transportation

### ***Batteries***

Materials, elementary cells, battery packs, battery management systems, systems integration, testing, reliability

### ***Fuel cells***

Membrane-electrode assembly, bipolar plate design, integration into transportation systems, safety, reliability

### ***Thermal technologies***

Concentrated solar power, storage, building and process energy efficiency, waste-heat and CO<sup>2</sup> recovery

### ***Clinatec***

Medical imaging, diagnostics, medical systems, treatments for neurodegenerative diseases

### ***Advanced manufacturing***

Robotics, cobotics, non-destructive testing, virtual and augmented reality, interactive simulation, training, ergonomics

### ***Cybersecurity***

Software security, component security, ICT security evaluation and certification

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