RESEARCH AND TECHNOLOGY DEVELOPMENT FRAMEWORK

Thrust 1
Organic Electro-Optic and
All-Optical Materials and Devices

Thrust 2
Light Sources and
Organic Electronics

STA 1
Materials, devices, and subsystems based on organic EO materials with large r_{33}

STA 2
Materials with large all-optical nonlinearities; devices and subsystems

STA 3
Light sources and organic field-effect transistors for smart integrated platforms

STA 4
Organic portable power generation

Project 1.1
E-O and spatial light modulators; hybrid integration with silicon

Project 1.2
Materials and devices for terahertz generation

Project 2.1
Materials for all-optical switching in integrated devices

Project 2.2
Free space signal processing and optically addressable SLM

Interfacial Properties

End-To-End Theory

Synthesis and Processing

Project 3.1
Organic light sources for displays and lighting

Project 3.2
Organic field-effect transistors for organic electronics

Project 4.1
Organic solar cells and integrated modules

Project 4.2
Packaging and processing for printed electronics