

Micro/nano sensors

Introduction: From more Moore to more than Moore concept - Physical characteristics of sensors - Operating principle of sensors - Micromachining techniques for sensor fabrication -- Pressure sensors, acceleration sensors - Examples of fabrication /operation of capacitive and piezoresistive silicon technology sensors - Temperature sensors, flow sensors and magnetic sensors - Chemical sensors and biosensors - Sensor characterization and calibration methodology - Optical sensors suitable for measuring radiation Micro and nano-sensors and Fabry-Perot fiber optical sensors - Methods of sensor reliability in production