**Keywords**

**PHEN** Sensor phenomena & characterization (sensitivity, selectivity, noise, aging, hysteresis, dynamic range, interfering effects, etc.).   
**SYST** Sensor system integration, multiple sensor systems, intelligent sensing, sensor arrays, "electronic nose".   
**MECH** Mechanical sensors such as: metallic, thin-film, thick film and bulk strain gauges, pressure sensors, accelerometers, angular rate sensors, displacement transducers, force sensors, bulk and surface acoustic wave sensors, ultrasonic sensors, flow meters and flow controllers.   
**THER** Thermal sensors such as: platinum resistors, thermistors, diode and transistor temperature sensors, thermocouples, thermopiles, pyroelectric and piezoelectric thermometers, calorimeters, bolometers.   
**OPTO** Optoelectronic/photonic sensors such as: photovoltaic diodes, photoconductors, photodiodes, phototransistors, position-sensitive photodetectors, photodiode arrays, charge-coupled devices, light-emitting diodes, diode lasers, other quantum devices, liquid-crystal displays; **camera and vision-based sensors**.   
**ION** Ionizing radiation sensors such as gamma ray, charged particle and neutron detectors.   
**INTG** Integrated optics/fiber optical devices such as those based on photometry, fluorimetry, surface plasmon resonance, interferometry, ellipsometry, **optical Fiber, fibre optic sensors, fiber-Bragg grating sensors.**   
**MICR** Microwave/millimeter wave sensors.   
**MAGN** Magnetic sensors such as: magnetoresistors, Hall-effect devices, magnetometers, magnetic-field sensors, solid-state read and write heads.   
**CHEM** Chemical and biological sensors, with emphasis on the electronics and physics aspects of transducing chemical and biological signals into information about chemical and biological agents **including microfluidic devices and lab-on-chip devices**.   
**MASS** Mass-sensitive devices such as quartz crystal microbalances and surface acoustic wave devices.   
**ACTU** Sensor-Actuators, including integrated sensor-actuators, smart sensor-actuators and networkable sensors-actuators.   
**COMB** Combined sensors (e.g., electrical & mechanical).   
**APPL** Automotive, medical, environmental monitoring and control, consumer, alarm and security, military, nautical, aeronautical and space sensor systems, and robotics and automation applications, intelligent sensors for applications such as on-line monitoring, process control, and test kits, Internet based and other remote data acquisition and control of sensors.   
**PACK** Packaging and interconnections.   
**SIGP** Sensor signal processing and array sensor fusion; physical model based statistical sensor array processing; sensors modeling and analysis; processing of wave (EM, acoustic, etc.) and non-wave (chemical, gravity, particle, thermal, radiative and non-radiative, etc.); source detection, estimation, and classification, including of substances as with chemical sensors.   
**MATR** Sensor materials and solid-state sensors, such as thin-film and thick-film gas sensors, humidity sensors, specific ion sensors (such as pH sensors), radon sensors, carbon monoxide sensors, viscosity sensors, density sensors, acoustic velocity sensors, proximity sensors, altimeters, and barometers.   
**MODL** CAD modeling and testing of sensors.   
**NET** Sensor system networks, sensor buses and communications, sensor decision and fusion, sensor telemetry.