IEEE Sensors Journal Editorial Keywords

SYST  Sensor system integration
• multiple-sensor systems
• smart sensor systems
• sensor arrays
• combined sensors (such as electrical & mechanical, etc.)
• packaging and interconnections

NETW  Sensor system networks
• sensor buses and communications
• networked sensor fusion and decisions
• sensor telemetry and monitoring

PHEN  Sensor phenomenology
• sensor testing and evaluation
• noise, interference effects, cross-talk
• aging, reliability, stability (against ambient interference)

MODL  Sensor modelling
• sensor model analysis
• sensor model analysis verification

SIEL  Sensor interface electronics
• sensor electronic circuits, sensor readout circuits
• sensor signal conditioning, sensor signal conversion, sensor signal digitization
• sensor signal processing for high precision and stability (amplification, filtering, linearization, modulation/demodulation)
• sensor signal processing under harsh conditions (EMC, radiation, humidity, temperature); energy consumption/harvesting

DATP  Sensor data processing
• soft computing with sensor data (such as pattern recognition)
• processing of wave (EM, acoustic, etc.) sensor data
• processing of non-wave (chemical, gravity, particle, thermal, radiative and non-radiative, etc.) sensor data
• detection, estimation based on sensor data

INTS  Intelligent Sensors
• machine learning driven sensor applications
• machine learning techniques for sensors, sensor data processing and fusion
• computing architectures (such as deep learning, evolutionary computing, in/near-memory and neuromorphic computing) for sensor systems
• machine learning hardware architectures for sensors and sensor system optimization
• sensor datasets and training/validation methodologies for machine learning

MECH  Mechanical sensors
• strain gauges: metallic, thin-film, thick film and bulk strain gauges
• pressure sensors
• accelerometers, gyroscopes, angular rate sensors, displacement transducers, force sensors
• bulk and surface acoustic wave sensors, ultrasonic sensors
• flow sensors
• microelectromechanical (MEMS) sensors

MASS  Mass-sensitive sensors
• quartz crystal microbalance
• surface acoustic wave sensors
• mass-sensitive gas sensors
• resonators/oscillators for sensors
THER  Thermal sensors
• platinum resistors, thermistors, diode and transistor temperature sensors
• thermocouples, thermopiles
• pyroelectric and piezoelectric thermometers
• calorimeters, bolometers

MAGN Magnetic sensors
• magnetoresistors, magnetometers
• Hall-effect devices, magnetic-field sensors
• solid-state read and write heads

OPTO  Optoelectronic/photonic sensors
• light-emitting diodes, diode lasers, other quantum sources for sensing
• photoconductors, photodiodes, phototransistors
• position-sensitive photodetectors, photodiode arrays, charge-coupled devices
• radar sensors
• imaging sensors
• sensors using photometry, fluorimetry, interferometry, ellipsometry, surface plasmon resonance

MICR  THz/Microwave/Millimeter wave sensors

IONI  Ionizing radiation sensors (such as gamma ray, X-ray, charged particle and neutron detectors)

FIBR  Fiber-optic sensors
• optical fibers for sensing
• fibre-Bragg grating sensors

INTO  Integrated optics sensors

APPL  Sensor applications
• automotive, medical, environmental monitoring and control,
• consumer, alarm and security, military, nautical, aeronautical and space sensor systems, robotics and automation
• applications of intelligent sensors (such as on-line monitoring, process control, test kits, RFID and other identification )
• internet based and other remote data acquisition and control of sensors

ACTU  Sensor-Actuators
• integrated sensor-actuators
• smart sensor-actuators
• networkable sensors-actuators

CHEM  Chemical and biological sensors
• electronics and physics of transduction for chemical and biological signals
• olfactory sensors ("electronic nose")
• microfluidic devices and lab-on-chip devices

MATR  Sensor materials and solid-state sensors
• thin-film and thick-film gas sensors,
• humidity sensors
• sensors for specific ions (such as pH sensors), radon, carbon monoxide
• viscosity sensors, density sensors
• acoustic velocity sensors, proximity sensors
• altimeters, barometers