**SENSORS AND ACTUATORS A: PHYSICAL**

An international journal devoted to research and development of physical transducers

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**DESCRIPTION**

*Sensors and Actuators A: Physical* brings together multidisciplinary interests in one journal entirely devoted to disseminating information on all aspects of research and development of **solid-state devices** for transducing **physical signals**. *Sensors and Actuators A: Physical* regularly publishes original papers, letters to the Editors and from time to time invited review articles within the following device areas:

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- **Materials** and their **Processing**, such as: piezoelectric materials, polymers, metal oxides, III-V and II-VI semiconductors, thick and thin films, optical glass fibres, amorphous, polycrystalline and monocrystalline silicon.

- **Optoelectronic sensors**, such as: photovoltaic diodes, photoconductors, photodiodes, phototransistors, positron-sensitive photodetectors, optoisolators, photodiode arrays, charge-coupled devices, light-emitting diodes, injection lasers and liquid-crystal displays.

- **Mechanical sensors**, such as: metallic, thin-film and semiconductor strain gauges, diffused silicon pressure sensors, silicon accelerometers, solid-state displacement transducers, piezo junction devices, piezoelectric field-effect transducers (PiFETs), tunnel-diode strain sensors, surface acoustic wave devices, silicon micromechanical switches, solid-state flow meters and electronic flow controllers.

- **Thermal sensors**, such as: platinum resistors, thermistors, diode temperature sensors, silicon transistor thermometers, integrated temperature transducers, PTAT circuits, thermocouples, thermopiles, pyroelectric thermometers, quartz thermometers, power transistors and thick-film thermal print heads.

- **Magnetic sensors**, such as: magnetoresistors, Corbino disks, magnetodiodes, Hall-effect devices, integrated Hall devices, silicon depletion-layer magnetometers, magneto-injection transistors, magnistors, lateral magnetotransistors, carrier-domain magnetometers, MOS magnetic-field sensors, solid-state read and write heads.
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• **Interface electronics**: electronic circuits which are designed to interface directly with the above transducers and which are used for improving or complementing the characteristics of these devices, such as linearization, A/D conversion, temperature compensation, light-intensity compensation, current/frequency conversion and microcomputer interfacing.

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Sensors and Actuators A brings together multidisciplinary interest in one journal entirely devoted to disseminating information on all aspects of research and development of solid-state devices for transducing physical signals. Sensors and Actuators A regularly publishes original papers, letters to the Editors and review articles within the following device areas:

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**Micromechanics** such as: research papers on actuators, structures, integrated sensors actuators, microsystems, and other devices or subdevices ranging in size from millimetres to sub-microns; micromechatronics; microelectromechanical systems; microrobots silicon and non-silicon fabrication techniques; basic studies of physical phenomena of interest to micromechanics; analysis of microsystems; exploration of new topics related to micromechanics; microsystem-related problems like power supplies and signal transmission; microsystem-related simulation tools; other topics of interest to micromechanics.

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**Sensor Systems and Applications** such as: sensor buses, multiple-sensor systems, sensor networks, voting systems, telemetering, sensor arrays, and automotive, environmental, monitoring and control, consumer, medical, alarm and security, robotic, nautical, aeronautical and space measurement systems.

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