ELSEVIER

SENSORS AND ACTUATORS A: PHYSICAL

An international journal devoted to research and development of physical transducers

AUTHOR INFORMATION PACK

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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:

• Fundamentals and **Physics**, such as: classification of effects, physical effects, measurement theory, modelling of sensors, measurement standards, measurement errors, units and constants, time and frequency measurement. Modeling papers should bring new modeling techniques to the field and be supported by experimental results.

• **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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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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antireflection
artifact
band bending
bandgap
bandwidth

co-evaporate
cross section
cross-sectional
crosstalk
feedback (adj.)
flat-band (adj.)
Gaussian
Kirchhoff
lifetime
linewidth
microelectronics
micromechanics midpoint
multilayer
multi-target
non-crystalline
n-type (adj.)
open-circuit (adj.)
photoemission
photogenerate
photoresist
p-type (adj.)
printout
readout
reverse-bias (adj.)
rod-like (adj.)
semicontinuous
short-circuit (adj.)
single-crystal (adj.)

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