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DESCRIPTION

*Sensors & Actuators, B: Chemical* is an interdisciplinary journal dedicated to covering research and development in the field of chemical sensors, actuators and Microsystems.

The scope of the journal encompasses, but is not restricted to, the following areas:
- Sensing principles and mechanisms
- New materials development (transducers and sensitive/recognition components)
- Fabrication technology
- Actuators
- Optical devices
- Electrochemical devices
- Mass-sensitive devices
- Gas sensors
- Biosensors
- Analytical microsystems
- Environmental, process control and biomedical applications
- Signal processing
- Sensor and sensor-array chemometrics

μTAS - Micro Total Analysis Systems: Microsystems for the generation, handling and analysis of (bio)chemical information

The special section of *Sensors & Actuators, B: Chemical* on micro TAS is dedicated to contributions concerning miniaturised systems for (bio)chemical synthesis and analysis, also comprising work on Bio-MEMS, Lab-on-a-chip, biochips and microfluidics.

Topics covered by the micro TAS section include:
- Physics and chemistry of microfluidics
- Microfabrication technology for micro TAS
- Analytical chemical aspects
- Detectors, sensors, arrays for micro TAS
- Micro TAS applications
- DNA analysis
- Microinstrumentation
- Microsystems for combinatorial chemistry.
AUDIENCE

Academic and Industrial Researchers in Analytical Chemistry and Instrument Development

IMPACT FACTOR

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Nicole Jaffrezic-Renault, Centre National de la Recherche Scientifique (CNRS), Villeurbanne, France
Jong-Heun Lee, Korea University, Seoul, The Republic of Korea

Metal oxide gas sensors, Metal oxide nanostructures for gas sensor applications, Metal oxide humidity sensors, Electrochemical gas sensors using solid oxide electrolytes, Sensing principles and mechanisms, Carbon-based gas sensors.

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Ralf Moos, Universität Bayreuth, Bayreuth, Germany

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Ramaiyer Narayanaswamy
Optical Chemical sensors and Biosensors: development, applications and analytical instrumentation. New materials, devices, nano materials for optical chemical sensing, for environmental, biochemical
and industrial applications; Colorimetric and Fluorescence based sensing systems. Nanoparticles, molecularly imprinted polymers, quantum dots, carbon dots and other novel materials in sensors; Surface Plasmon Resonance sensors and sensing systems: devices and instrumentation with application; Mass sensitive devices, instrumentation and applications, e.g. SAW, BAW, QCM, QMB, etc.

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**Gustavo Rivas**, Universidad Nacional de Córdoba, Córdoba, Argentina
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**Yasuhiro Shimizu**, Nagasaki University, Nagasaki, Japan
Semiconductor gas sensors including metal oxide-based and polymer-based gas sensors, humidity sensors based on any principles, Sensing principles and mechanisms of semiconductor gas sensors, Nanstructured materials and carbon-based materials for gas sensor applications.

**Hiroaki Suzuki**, University of Tsukuba, Tsukuba, Ibaraki, Japan
Manabu Tokeshi, Hokkaido University, Sapporo, Japan
Microfluidics, Biosensors.

**Udo Weimar**, Eberhard-Karls-Universität Tübingen, Tübingen, Germany
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Aims and Scope
Sensors & Actuators, B: Chemical is an interdisciplinary journal dedicated to covering research and development in the field of chemical sensors, actuators, micro- and nanosystems. The scope of the journal encompasses, but is not restricted to, the following areas:
• Sensing principles and mechanisms
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• Optical devices
• Electrochemical devices
• Mass-sensitive devices
• Gas sensors
• Biosensors
• Bio-MEMS
• Analytical microsystems
• Environmental
• Process control
• Biomedical applications
• Signal processing
• Sensor and sensor-array chemometrics

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Topics covered by the μTAS section include:
• Lab-on-a-chip
• Physics and chemistry of microfluidics
• Microfabrication technology for μTAS
• Analytical chemical aspects
• Detectors, sensors, arrays for μTAS
• μTAS applications
• DNA analysis
• Microinstrumentation
• Microsystems for combinatorial chemistry

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