DESCRIPTION

Microelectronic Engineering has an open access mirror journal Micro and Nano Engineering, sharing the same aims and scope, editorial team, submission system and rigorous peer review.

Microelectronic Engineering is the premier nanoprocessing, and nanotechnology journal focusing on fabrication of electronic, photonic, bioelectronic, electromechanic and fluidic devices and systems, and their applications in the broad areas of electronics, photonics, energy, life sciences, and environment. It covers also the expanding interdisciplinary field of "more than Moore" and "beyond Moore" integrated nanoelectronics / photonics and micro-/nano-/bio-systems. Through its unique mixture of peer-reviewed articles, reviews, accelerated publications, short and Technical notes, and the latest research news on key developments, Microelectronic Engineering provides comprehensive coverage of this exciting, interdisciplinary and dynamic new field for researchers in academia and professionals in industry.

The journal addresses the following topics and considers mostly experimental work, or theoretical / simulation work directly linked and supporting experiments in the fields: Microelectronics processing & materials (Lithography, Self-assembly, Plasma Processing, Metallization, 3D Integration, Related Materials.) Micro-/Nano-engineering / fabrication / technology / manufacturing Nanoelectronic and photonic devices and their fabrication Microsystems, microdevices (e.g., sensors and nanoenergy devices) and their fabrication Microfluidics, life science devices /sensors, as well as integrated Lab-on-a-chip and their fabrication

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3. **Materials** Metallization and Barrier Materials Silicon on Insulators Dielectrics (low K and high K) Interconnects New Resist Materials Nanomaterials for Device Fabrication Block Copolymers Polymers and Flexible Substrates Layered (2D) Materials and Related Transferring Techniques

4. **Nanometrology, Inspection and Testing** Electron Beam Testers Laser Probes Signal and Image Processing Nanometrology AFM and Scanning Probe Measurements


  Micro and Nano Fluidic Devices Pumping / valving devicesMixing devicesSeparation devicesMicroreactorsSample preparation devicesFluidic interfaces and integration

Miniaturized Devices for Biology, Chemistry, MedicineBiosensorsChemical sensorsBiomimetic properties incorporated into devicesBioelectronic devicesMicro / nano / bio interface and interconnection devices

Lab-on-a-chip, bioMEMS, microTASDNA / protein chipsCell on chipOrgan on chipBiomimetic properties incorporated into systemsBioanalytic, diagnostic systemsMicroseparation, pretreatment systemsOn-chip detection systemsEnvironmental and food monitoring systemsMicroreactors

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**AUDIENCE**

Scientists and engineers in industry and academia involved in micro and nanoelectronics.

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INTRODUCTION
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The journal is dedicated to advanced engineering methods for micro- and nanofabrication of electronic devices, circuits and systems for electronics, electromechanics, and bioelectronics.

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\begin{align*}
10^4\text{[NaCl]/mol l}^{-1} \\
4.2  \\
3.5  \\
0.26 \\
\end{align*}

rather than:

\begin{align*}
\text{[NaCl]/mol l}^{-1} \\
4.2 \times 10^{-4}  \\
3.5 \times 10^{-4}  \\
2.6 \times 10^{-5} \\
\end{align*}

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