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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

In detail the topics covered are as follows:

1. **Nanolithography and Nanopatterning**: Optical Lithography Electron Optical Methods and Systems X-ray Optical Methods and Systems Resists Limits of Nanolithography Nanoimprint Lithography EUV Lithography and Masks Charged Particle Based Lithography and Patterning Nanoimprint Lithography Techniques and Templates Maskless Lithography Emerging Nanopatterning Methods Limits of Nanopatterning

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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 devices Mixing devices Separation devices Microreactors Sample preparation devices Fluidic interfaces and integration

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   Lab-on-a-chip, bioMEMS, microTAS DNA / protein chips Cell on chip Organ on chip Biomimetic properties incorporated into systems Bioanalytic, diagnostic systems Microseparation, pretreatment systems On-chip detection systems Environmental and food monitoring systems Microreactors

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INTRODUCTION
The aim of Microelectronic Engineering is to bring together in one publication the results of international work in the rapidly expanding field of integrated microelectronics.

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3.5
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