## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>p.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience</td>
<td>p.2</td>
</tr>
<tr>
<td>Impact Factor</td>
<td>p.2</td>
</tr>
<tr>
<td>Abstracting and Indexing</td>
<td>p.3</td>
</tr>
<tr>
<td>Editorial Board</td>
<td>p.3</td>
</tr>
<tr>
<td>Guide for Authors</td>
<td>p.7</td>
</tr>
</tbody>
</table>

## 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

2. **Pattern Transfer** Ion Technology Plasma Processing Transfer of Pattern with Other Methods Plasma Etching Plasma Nanotechnology Plasma / beam Nanopatterning Plasma Surface Modification of Devices Wet transfer methods
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Metallization and Barrier Materials
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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

5. **Advanced Processing and Nanofabrication**
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Three Dimensional Integration
Other / Emerging Manufacturing and Fabrication Techniques
3D Printing
Rapid Thermal Processing
Process Modelling and Simulation
Equipment Modelling
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Top-Down / Bottom-Up (Self-Assembly)
Nanofabrication Growth, Planarization, Cleaning Techniques for Devices
Plasma deposition
MBE
Other growth techniques
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Organic and molecular electronics
Flexible electronics
Wearable electronics
Paper electronics
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Physical sensors and actuators
Energy harvesting devices

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Power MEMS
RF MEMS
MOEMS
Magnetic MEMS
Optical and Photonic Systems

Micro and Nano Fluidic Devices
Pumping / valving devices
Mixing devices
Separation devices
Microreactors
Sample preparation devices
Fluidic interfaces and integration

Miniaturized Devices for Biology, Chemistry, Medicine
Biosensors
Chemical sensors
Biomimetic properties incorporated into devices
Bioelectronic devices
Micro / nano / bio interface and interconnection devices

Lab-on-a-chip, bioMEMS, microTAS
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Environmental and food monitoring systems
Microreactors

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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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<table>
<thead>
<tr>
<th>104[NaCl]/mol l-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2</td>
</tr>
<tr>
<td>3.5</td>
</tr>
<tr>
<td>0.26</td>
</tr>
</tbody>
</table>

rather than:

<table>
<thead>
<tr>
<th>[NaCl]/mol l-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 x 10-4</td>
</tr>
<tr>
<td>3.5 x 10-4</td>
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