

Special Issue

Recent Advances in Micro- and Nanofabrication: Beyond Planar Silicon Process

Message from the Guest Editor

The planar micro-nanofabrication process on silicon has been the workhorse of microelectronics for years and has played a seminal role in the development of MEMS technology. In this Special Issue, we want to highlight recent advances in micro-nanofabrication technology that open up new possibilities for device batch fabrication. Typical topics that will be considered include but are not limited to:

- 3D and 4D patterning;
- Patterning on non-flat substrates;
- Ion-beam-based process (FIB, implantation, etc.);
- Laser-based process;
- 3D exposure and etch process;
- 3D micro-nanoprinting techniques (multi-photons, STM, etc.);
- Multifunctional materials batch fabrication;
- Piezoelectric on insulator (POI) substrate-based process;
- High aspect ratio process;
- Thick oxide patterning (Ta₂O₅, TiO₂, LiNbO₃, LiTaO₃, etc.);
- Flexible substrate;
- PDMS-based batch fabrication;
- Bottom-up fabrication process;
- Nanofiber/nanoparticle integration;
- Near-field electrospinning.

Guest Editor

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