

Editorial

Special Issue on “MEMS/NEMS Fabricated Tissue Scaffolding Devices”

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Over the past decade, tissue engineering in the field of medicine has proven to provide alternative therapies for tissue or organ implants, especially providing a functional implantation and avoiding immune rejection of tissues and organs. Cell, scaffold and growth information are considered to be the basic elements of tissue engineering. Scaffolds are expected to support cell colonization, migration, growth and differentiation, and to guide the development of the required tissue. In cell biology, it has been demonstrated that cell adhesion, proliferation, migration and differentiation can be manipulated using scaffolds of different micro- or nano-structures. Recent progress in MEMS/NEMS fabrication techniques has enabled the production of diverse scaffolds of micro- and nano-structures, on various biomaterials, for tissue regeneration applications. This Special Issue focuses on the state of the art in scaffold design and fabrication themes based on MEMS/NEMS manufacturing techniques. The topics include the design, fabrication, characterization and cell culture of the tissue scaffolds using MEMS/NEMS approaches,

- tissue engineering
- tissue scaffold design
- MEMS/NEMS fabricated tissue scaffold

We hope that you will share our enthusiasm for this promising special issue theme and look forward to working with you to make it a leader in its field.

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