New Trends and Applications in Femtosecond Laser Micromachining

Message from the Guest Editors

Femtosecond laser micromachining has been widely used in many research and industrial fields in applications ranging from material processing to microdevices’ fabrication. Indeed, the strong versatility of femtosecond laser micromachining allows working with both transparent and absorptive materials by inducing permanent modifications in the bulk of substrates, by removing material or structuring surfaces or even by growing three-dimensional free-standing structure by direct laser writing. This Special Issue aims to highlight the latest achievements in various applications of femtosecond laser micromachining, with particular interest in new approaches that will pave the way to the future in this technology field. We are looking for research papers, short communications, and review articles that focus on new routes in the exploitation of femtosecond laser machining in the following applications:

- Surface structuring and patterning
- Drilling, cutting and welding
- Multiphoton polymerization
- Lab-on-chip
- Biophotonics
- Integrated optics