

Special Issue

Laser Modification and Etching of Polymer Material Surfaces

Message from the Guest Editor

Laser has been demonstrated to be a flexible and versatile tool for the precision engineering of a wide range of materials over other established micromachining techniques. Laser modification is usually performed by curing photo (light-sensitive) polymers, increasing surface adhesiveness (hydrophilicity), and functionalizing the surface via photoinitiated polymer grafting in the presence of a photoinitiator/photosensitizer. Laser etching uses the tightly focused laser with high coherence and directionality to realize materials removal due to sufficiently high multiphoton absorption or other nonlinear effects allowing internal structuring, which has the characteristics of noncontact, no wear, and deformation. Laser treatments enable precise surface modification with little surface damage, easily controlled with environmentally clean and safe processes. This Special Issue focuses on the technological advances and current applications of laser modification and etching of material surfaces, including but not limited to the fields of microelectronics, biomedicine, photonics, and microfluidics.

Guest Editor

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Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.9.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker

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