



Ultrafast Laser Science and Advanced Technologies

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Message from the Guest Editor

Dear Colleagues,

Ultrashort light pulses are indispensable in micromachining, metrology and medical instrumentation, amongst other applications. Likewise, outstanding research closely linked to the field has been recognized by numerous prestigious awards. Ultrashort light pulses are subject of an extraordinary success story. It began in the early 1960s, shortly after the invention of the laser, and has not lost any of its excitement. Novel technologies are developed and new applications emerge, ranging from fundamental science to market-ready products.

This Special Issue targets a collection of innovative research papers that cover the great variety of ultrafast laser science and technology. The topics include, but are not limited to:

- Generation and amplification of ultrashort pulses;
- Solid-state and fiber ultrafast lasers;
- Carrier-envelope phase stabilization and ultrafast frequency combs;
- Ultrafast lasers at large-scale facilities;
- Ultrafast secondary sources;
- Characterization of ultrashort pulses;
- Ultrafast nonlinear optics;
- Spectroscopy and microscopy with ultrashort pulses;
- Communications with ultrashort pulses;
- Fundamental science with ultrafast lasers.

