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## Ultrafast Pulse Shaping Techniques: From Temporal to Spatiotemporal Control

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Deadline for manuscript submissions:

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## **Message from the Guest Editors**

In this Special Issue, "Ultrafast Pulse Shaping Techniques: From Temporal to Spatiotemporal Control", we invite contributions that underscore the recent advancements and innovative applications in this rapidly evolving field. We welcome theoretical, numerical, and experimental studies, including (but not limited to):

- Novel techniques for shaping ultrafast pulse in temporal, spatial, and spatiotemporal domains with the use of liquid crystal and other devices;
- Novel effects and techniques in frequency conversion;
- Ultrafast pulse characterization methods;
- Ultrafast light-matter interactions;
- Applications of ultrafast pulse shaping in superresolution imaging, nanofabrication, quantum information processing, material science, and optical communications;
- Biomedical applications that leverage ultrafast pulse shaping;
- Exploration of ultrafast phenomena enabled by advanced pulse shaping;
- Pulse shaping in nonlinear optics and spectroscopy;
- Challenges and solutions in the development and application of advanced pulse shaping techniques.



