



Advances in Ultrafast Optics: From Fundamental Science to Applications

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Message from the Guest Editors

Since the first attempts to generate and control laser pulses in the femto/atto seconds time scale, ultrafast optics has developed and become a mature and autonomous branch of optics. In this research field, several sub-branches have developed, becoming extremely interconnected between one another.

Light-matter interaction can be exploited to probe the behaviour of exotic materials and to control chemical reaction channels. The control and measurement of polarization of ultrashort pulses has introduced a new freedom degree in the design of experiments. Moreover, interconnections with quantum computing and quantum communications are intriguing, as are the production and the applications of squeezed light states.

This Special Issue, entitled “Advances in Ultrafast Optics: From Fundamental Science to Applications”, aims to collect the most recent advances in this very interconnected research field, in the form of both regular and review papers.

