



photonics



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Strong Light Fields Coupled with Plasmonic Nano-Structures

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Message from the Guest Editors

The interaction of strong light fields with plasmonic nanostructures presents a particular arena to study laser-induced electron dynamics in its natural temporal and spatial scales. When a strong and short laser pulse interacts with metal or dielectric nanotargets, nanostructures, nanoparticles, etc., plasmonic fields are generated. These fields present peculiar properties, namely, an enhancement with respect to incident field and spatial variations at a nanometric scale. The attosecond physics community is facing exciting times ahead, considering it is merging with nanoscale physics. This marriage calls for groundbreaking discoveries.

The Present Special issue is devoted to recent advances, both experimental and theoretical, in the interaction of strong and short laser pulses with nanotargets. Subjects of interest include but are not limited to the following areas:

Laser–matter interaction driven by plasmonic fields;

Nanophotonics;

Plasmonics;

Nanotarget design;

Strong light fields;

Ultrafast optics;

Strong field physics



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Special Issue