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Laser Synthesis

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Message from the Guest Editor

Nowadays, the laser-based synthesis of nanoscopic objects of micro- and nano-structures have found their place in many areas, such as integrated optical devices, catalysis, sensors, displays, quantum dots, solar cells, nano-biophotonics, and medicine. Modern progress in these applications is based on a combination of both experimental and numerical studies.

This Special Issue of *Molecules* aims to collect papers covering all types of laser interactions with various materials, ranging from metals to dielectrics and polymers, from non-organic to organic, from macroscopic to micro- and nano-scopic objects. The involved laser systems can also vary from continuous wave (CW) to ultra-short (femtosecond), and even the most modern can be attosecond ones. The articles should not only describe laser-based techniques and results, but, importantly, should bring more light on the mechanisms involved, such as non-linear photo-ionization, photo-chemistry, non-linear laser propagation effects, electronic excitations, charge transfer, and so on.



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Special Issue



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Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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