# Special Issue

# Advances in Plasma and Laser Engineering

## Message from the Guest Editor

This Special Issue is intended to provide a description of devices and processes related to the advances in plasma and laser engineering. Plasma is called the fourth state of matter because its properties differ significantly from those of ordinary gas. Plasma can be determined as a conductive medium generated by the ionization of gases. Therefore, it occurs as a mixture of photons, electrons and ions, but it can also contain neutral atoms and molecules.

A laser is a device that emits electromagnetic radiation in the visible, ultraviolet or infrared range, using the phenomenon of forced emission. Laser radiation is coherent, usually polarized, and has the form of a beam with very little divergence. In a laser, it is easy to obtain radiation with a very small line width, which is equivalent to very high power in a selected narrow spectral region. Plasma and laser applications include, but are not limited to, the production of new materials and the improvement of the properties of existing materials. The plasma or laser treatment of materials may lead to physico-chemical changes in the structure of their surfaces.

## Guest Editor

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## Deadline for manuscript submissions

closed (20 November 2023)

**Materials**

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### Message from the Editor-in-Chief

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