

Extreme-Ultraviolet and X-ray Optics

Guest Editors:

**Prof. Dr. Dimitris
Charalambidis**

Dr. Poletto Luca

Prof. Dr. Philippe Zeitoun

Deadline for manuscript
submissions:

closed (31 October 2022)

Message from the Guest Editors

Dear Colleagues,

Laser-driven extreme ultraviolet (XUV) and X-ray sources are continuously advancing, enabling innovative experiments in groundbreaking research areas.

The extreme operational parameters of these sources, such as the short pulse duration, the high peak and/or average intensities, and the wave-front properties put high demand on XUV and X-ray optics, including materials, coatings, focusing/steering elements, filters, sensors, detectors, delay lines, and spectrometers, to mention a few. The advancement of the sources has acted as a driver of enormous progress in the development and applications of novel XUV and X-ray optics. Some of these developments are also pertinent to other XUV and X-ray sources. Others are specific to laser-driven sources and research infrastructures, for example, Extreme Light Infrastructure, Laserlab Europe, and Attolab.

The aim of this Special Issue is to provide an overview of the state of the art in XUV and X-ray optics of laser-based laboratories, from the point of view of the development of technologies, methods, and instrumentation, as well as of their utilization in cutting-edge experiments and visions toward future breakthroughs.

