

## Special Issue

# Ultrafast X-ray Spectroscopy

### Message from the Guest Editors

It is our great pleasure to invite you to submit an article for the Special Issue of *Molecules*, titled “Ultrafast X-ray spectroscopy”. The recent development of a new generation of X-ray radiation sources and the great improvement in time and spectral resolution of experimental instruments can open up new qualitative possibilities for studying nature in unprecedented detail, with sub-femtosecond and sub-nanometer precision. Ultrafast photoinduced electronic and nuclear dynamics, which can be uncovered with the help of X-ray spectroscopy, lies in the basics of chemical reaction control, advances of material science and technology, as well as fundamental understanding of non-linear light-matter interaction. This Special Issue invites contributions of recent advanced theoretical and experimental studies of various ultrafast processes (electronic, nuclear, or structural dynamics) in different systems ranging from single molecules to molecular clusters, molecular liquids, and condensed matter using X-rays as the main tool.

### Guest Editors

Dr. Victor V. Kimberg

Dr. Nanna Holmgaard List

Dr. Thomas Fransson

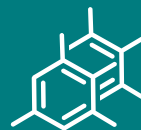
Dr. Iulia Brumboiu

Dr. Valeria Lanzilotto

Dr. Oksana Travnikova

### Deadline for manuscript submissions

closed (30 April 2023)



## Molecules

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

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