

CALL FOR PAPERS

Conference Title: 17th International Conference on X-ray Lasers (ICXRL), 8-10 December 2020, online

Conference Chair: Davide Bleiner, Empa Materials & Technology

Conference Organization: Empa Materials & Technology, Swiss Chemical Society, SPIE

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The ICXRL was established to promote the development of advanced extreme UV and X-ray sources, and of their applications in physics, (bio-) chemistry, or materials science. Joining ICXRL means experiencing the latest trends, and shaping the future progress. Technical and scientific papers that push beyond the scope of the state-of-the-art in the following topics are solicited :

Fundamentals and Theory

- Codes & Simulations
- Femto and Atto-science
- New amplification schemes
- Relativistic phenomena for future sources

Novel Techniques and Methods for source development

- Plasma-based XUV lasers in ASE and seeded modes
- High order harmonic generation from gases and solids
- X-ray and XUV free-electron lasers
- Table-top relativistic X-ray sources

High-Power Lasers

- Designs and integration
- Scalability
- Pulse shaping

X-ray Optics, Imaging and Metrology

- Optics and lithography with interferometric and holographic procedures
- Extreme-ultraviolet lithography (EUV) based on reflective optics
- Coherent diffraction imaging, ptychography
- Temporal and wavefront metrology

Applications

- Ultrafast imaging
- Non-linear processes with X-rays
- Semiconductor micro- and nano-electronics
- Chemical processes in operando
- Water window microscopy

Lecturers are expected to submit a paper for the proceedings of the conference, which will be published in a dedicated book by SPIE. The papers contain novel technical data, methodology, and description to explain results and support conclusions and adequate references and figure credits, with at least four full pages long, formatted according to SPIE specifications. The papers are submitted to the SPIE portal related to the conference. Information is available at <https://scg.ch/icxrl/2020>.