



Semiconductor Lasers and Laser Dynamics X (PE112)

Conference Chairs: **Marc Sciamanna**, CentraleSupélec (France); **Krassimir Panajotov**, Vrije Univ. Brussel (Belgium); **Sven Höfling**, Julius-Maximilians-Universität Würzburg (Germany)

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The conference will be concerned with all types and all aspects of semiconductor lasers.

Topics include, but are not limited to:

- Fabry-Perot, DFB, DBR laser diodes, multisection devices
- VCSELs
- semiconductor VCSELs (optically or electrically pumped)
- quantum and interband cascade lasers
- novel laser structures like micro-, nano-cavities, photonic crystals
- single-photon and entangled photon semiconductor sources
- modulator-integrated lasers
- lasers for silicon photonics
- epitaxial growth and processing aspects
- low-dimensional active regions in semiconductor lasers (quantum dashes, dots, etc.)
- novel semiconductor laser materials
- UV to IR laser emission wavelengths
- wavelength tuning, spectral properties
- laser emission profile shaping
- high power generation, high brightness emission
- laser diode dynamics

- high-speed modulation
- external feedback, optical injection and coupled semiconductor lasers
- mode locking
- neuromorphic computing using semiconductor laser dynamics
- patterns and localized structures in semiconductor lasers
- noise
- new phenomena in semiconductor lasers
- topological lasers
- advanced laser diode integration and system applications aspects
- physics and theory of semiconductor lasers
- numerical methods, modeling and simulations
- semiconductor optical amplifiers

Submissions of papers addressing one or more of these items are welcome.

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Present your research at SPIE Photonics Europe

Below are abstract submission instructions, the accompanying submission agreement, conference presentation guidelines, and guidelines for publishing in the Proceedings of SPIE on the SPIE Digital Library. Submissions subject to chair approval.

Important dates

Abstracts due	15 November 2021
SPIE sends author notification to contact author	12 January 2022
Registration opens	January 2022
Manuscripts due	9 March 2022

*Authors must register prior to uploading their manuscript.

What you will need to submit

- Title
- Author(s) information
- 500-word abstract for technical review
- 300-word summary for the program
- Keywords used in search for your paper (optional)
- Check the individual conference Call for Papers for additional requirements (for example, some conferences require 2- to 3-page extended summary for technical review, or have instructions for award competitions)

Note: Only original material should be submitted. Commercial papers, papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

How to submit your abstract

- Visit the conference page: www.spie.org/pe1112call
- You may submit more than one abstract but submit each abstract only once.
- Click the "Submit An Abstract" button on the conference page.
- Sign in to your SPIE account or create an account if you do not already have one.
- Follow the steps in the submission wizard until the submission process is completed.

Submission agreement

All presenting authors, including keynote, invited, oral, and poster presenters, agree to the following conditions by submitting an abstract:

- Register and pay the author registration fee.
- Oral Presenters: Submit a presentation video by the advertised due date, or agree to the presentation capture of your presentation on site, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Poster Presenters: Submit a Poster PDF and optional preview video by the advertised due date, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Submit a 4-page-minimum manuscript by the advertised due date, for online conference viewing during the event and publication in the Proceedings of SPIE on the SPIE Digital Library.
- Obtain funding for registration fees, travel, and accommodations, independent of SPIE, through their sponsoring organizations
- Ensure that all clearances, including government and company clearance, have been obtained to present and publish. If you are a DoD contractor in the USA, allow at least 60 days for clearance.
- Attend the meeting.
- Present at the scheduled time.

Review and program placement

- To ensure a high-quality conference, all submissions will be assessed by the Conference Chair/Editor for technical merit and suitability of content.
- Conference Chairs/Editors reserve the right to reject for presentation any paper that does not meet content or presentation expectations.
- Final placement in an oral or poster session is subject to Chairs discretion.

Publication of Proceedings in the SPIE Digital Library

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