



## Semiconductor Lasers and Laser Dynamics XI (PE113)

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The conference will cover all types and all aspects of semiconductor lasers. Topics include, but are not limited to:

- Fabry-Perot, DFB, DBR laser diodes, multi-segment devices
- VCSELs, VECSELs
- quantum and interband cascade lasers
- semiconductor optical amplifiers
- novel laser structures like micro-, nano-cavities, photonic crystals
- single-photon and entangled photon semiconductor sources for quantum photonics
- 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
- physics and theory of semiconductor lasers
- numerical methods, modeling and simulations.

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

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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	30 November 2023
Authors notified and programme posts online	25 January 2024
Registration opens	8 January 2024
Submission system opens for manuscripts and poster videos/PDFs*	5 February 2024
Manuscripts due	20 March 2024

\*Contact author or speaker must register prior to uploading

**What you will need to submit**

- Presentation title
- Author(s) information
- Speaker biography (1000-character max including spaces)
- Abstract for technical review (200-300 words; text only)
- Summary of abstract for display in the programme (50-150 words; text only)
- Keywords used in search for your paper (optional)
- Check the individual conference call for papers for additional requirements (i.e. extended abstract PDF upload for review or 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/pe113call](http://www.spie.org/pe113call)
- You may submit more than one abstract, but submit each abstract only once
- Submit by clicking 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
- If your submission is related to an application track below, indicate the appropriate track when prompted during the submission process

**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
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- Poster presenters: submit a poster PDF by the advertised due dates for publication in the Proceedings of SPIE in the SPIE Digital Library; poster PDFs may also be published and viewable in the spie.org programme during and immediately after the event. Each poster must have a unique presenter; one person may not present more than one poster
- Email messaging for the conference series
- Submit a manuscript by the advertised due date for publication in the Proceedings of SPIE in the SPIE Digital Library
- Obtain funding for registration fees, travel, and accommodations
- Attend the meeting
- Present at the scheduled time

**Review and programme 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 chair discretion

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