Oxide-based Materials and Devices XII (OE108)

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Oxides are remarkable multifunctional materials with a huge range of emerging applications spanning domains as diverse as solid-state lighting, photovoltaics, nanotechnology, capacitors, transparent electronics, next-generation memories, sensors, and spintronics. A number of breakthroughs over the past few years have driven an exponential surge in research activity in the field. This interdisciplinary conference is intended to cover (but not be limited to) oxide materials for use as transparent conductors, opto-semiconductors, ferroelectrics, piezoelectrics, dielectrics, multiferroics, superconductors, magnetic oxides, metamaterials, and various electrical/optical components. We would like to encourage you to take part in this conference and submit an abstract. Presentations are solicited on the following topics:

- bulk growth and characterization
- thin films and multilayers (growth, interfaces, surfaces, and properties) of oxides, and oxides/non-oxide
- 2D materials
- nanostructured growth, properties and applications
- amorphous oxide semiconductors
- highly-correlated complex systems
- phase transitions
- modeling and theoretical studies
- structural, mechanical, electrical, chemical, thermal, magnetic, and optical properties
- degenerate conduction
- plasmonics
- doping and band gap engineering
- photon-induced phenomena in complex oxides
- optical studies
- processing, etching, annealing, and formation of ohmic and Schottky contacts
- applications including: LEDs, lasers, photovoltaics, TCOs, transparent electronics, FETs, TFTs, memories, spintronics, scintillators, sensors, actuators, SAW devices, MEMS, optical coatings plus devices for high temperature, RF, radiation hard, microwave, and radar applications
- integration with Si + beyond Si oxide electronics
- gate-controlled metal-insulator transitions in oxides
- multilayered oxide structures for optical materials
- graphene/graphene oxide/hybrids of graphene and oxides
- nanionics
- energy management: production, harvesting, and storage
- “green” processing of materials/devices (cost-competitive biocompatible materials and processes).

Building on the last two years of excellent contributions, we are again calling for special focus sessions on Ga2O3 and perovskite solar cells.
Present your research at SPIE Photonics West

Follow these instructions to develop a successful abstract and accompanying manuscript for the conference and for publication in the Proceedings of SPIE in the SPIE Digital Library.

How to submit an abstract

1. Browse the conference program and select the conference(s) that most closely matches the topics of the research you wish to present. **Important: each abstract may be submitted to one conference only.**
2. Click “Submit an Abstract” from within the conference you’ve chosen, and you’ll be prompted to sign in to your spie.org account to complete the submission wizard.

3. If your submission is related to an application track, indicate the appropriate track when prompted during the submission process.

What you will need to submit

A completed electronic submission should include the following:

- Title
- Author(s) information
- 250-word abstract for technical review
- 100-word summary for the program
- Keywords used in search for your paper (optional)
- Your decision on publishing your presentation recording to the SPIE Digital Library (slide capture and audio)
- 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 competing for awards)

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.

Important dates

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<td>Abstracts Submission Deadline</td>
<td>26 August 2020</td>
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<td>Acceptance Notification Sent to Contact Author</td>
<td>2 November 2020</td>
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<td>Manuscripts Due (Conferences OE506, and OE801-OE803 Only)</td>
<td>20 January 2021</td>
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<tr>
<td>Manuscripts Due (All Conferences EXCEPT OE506, and OE801-OE803)</td>
<td>16 February 2021</td>
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Submission agreement

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
- Attend the meeting
- Present at the scheduled time
- Publish their manuscript in the SPIE Digital Library

6-page manuscript minimum for LASE and OPTO; 4-page minimum for BIOS; 20-page maximum

- 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.

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

- Conference Chairs/Editors may require manuscript revision before approving publication and reserve the right to reject for publication any paper that does not meet acceptable standards for a scientific publication.
- Conference Chair/Editor decisions on whether to allow publication of a manuscript are final.
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Contact information

For questions about submitting an abstract, or the meeting, contact the Conference Program Coordinator.

www.spie.org/oe108call