OPTICA
Advancing Optics and Photonics Worldwide
Formerly OSA

Call for Papers

Abstract and Summary Submission Deadline: 16 March 2022

Imaging and Applied Optics Congress

PRESENTED WITH

Optical Sensors and Sensing Congress

11 – 15 July 2022

Hyatt Regency Vancouver
Vancouver, British Columbia, Canada

A Hybrid Meeting Format — In Person and Virtual

CO-LOCATED TOPICAL MEETINGS

3D Image Acquisition and Display: Technology, Perception and Applications

Adaptive Optics: Methods, Analysis and Applications

Computational Optical Sensing and Imaging

Imaging Systems and Applications

Propagation Through and Characterization of Atmospheric and Oceanic Phenomena

optica.org/ImagingOPC

IMAGING AND APPLIED OPTICS CONGRESS
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About the congress.

Recent leading-edge advances in the field of image acquisition, processing and display have led to major improvements in the image products on the market today.

Reported at this congress are the state-of-the-art advances that will continue to contribute to this progress. Examples to be discussed include: results to mitigate the effects on light propagation in complex media such as in biological tissue, and in scattering and turbulent atmospheres; compressive and computational image processing that in many cases employ machine learning techniques; the collection, processing, display and perception issues with 3-D information; and new approaches such as neuromorphic and metamorphic image processing.

Also to be reported are advances in image acquisition for use in autonomous platforms including UAV remote sensing and self-driving vehicles. Finally, presentations on sampling theory and inverse techniques applied to image-difficult problems will cover the details describing the limits in image acquisition and information extraction and will provide suggestions for improvements that can be applied to enhance current image acquisition capabilities.

Two congresses. One phenomenal event.

Imaging and Applied Optics Congress will be presented with Optical Sensors and Sensing Congress in a hybrid format comprised of in-person and online (virtual) options.

Nine topical meetings and a combined exhibition will provide enhanced opportunities to learn from and network with a significantly larger community of scientists.

Congress Chairs

Imaging and Applied Optics Congress



Ram Narayanswamy
Teaq Innovations, USA, Chair

Optical Sensors and Sensing Congress



Gerard Wysocki
Princeton University, USA, Chair

CO-LOCATED TOPICAL MEETINGS

Imaging and Applied Optics Congress

- 3D Image Acquisition and Display: Technology, Perception and Applications
- Adaptive Optics: Methods, Analysis and Applications
- Computational Optical Sensing and Imaging
- Imaging Systems and Applications
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Optical Sensors and Sensing Congress

Provides a forum to facilitate reporting the latest optical-based sensor advances and their use in a variety of applications across industries, and showcases the latest sensor prototypes and products.

- Applied Industrial Spectroscopy
- Laser Applications to Chemical, Security and Environmental Analysis
- Optical Sensors
- Optics and Photonics for Sensing the Environment

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Imaging Systems and Applications (IS)

IS brings together experts from many different scientific and engineering disciplines who contribute to the design and integration of optics, sensors, digital processing and displays in imaging systems. IS captures the state-of-the-art in unique light gathering optics, image sensor architectures and technology, on and off chip digital image processing, and methods for compression, storage, transmission, and utilization.

The meeting highlights the leading-edge use of imaging systems in consumer imaging, automotive and drone imaging, photography and digital cinematography capture and projection, remote sensing, microscopy, invasive and non-invasive surgery, and airborne and astronomical observations and imaging.

Latest advances in the research, engineering and systems design of imaging devices for applications in military, industrial, medical and consumer imaging.

Topic Categories

1. Computational and deep learning imaging systems
2. Advances in biomedical imaging
3. Advances in microscopic imaging
4. Advances in astronomical imaging
5. Novel imaging optics
6. Image segmentation and understanding
7. Image compression and resolution enhancement
8. Photographic and moving pictures color imaging systems

TOPICS OF SPECIAL INTEREST

1. Deep learning microscopy
2. Optical coherence tomography
3. Imaging for autonomous vehicles
4. Imaging sensors for mobile computing and AR/VR applications
5. Industrial and visual inspection approaches

Chairs



Michelle Digman
University of California, Irvine, USA, Chair



Francisco Imai
Apple Inc., USA, Chair



Zhongping Chen
University of California, Irvine, USA, Program Chair



Zeev Zalevsky
Bar-Ilan University, Israel, Program Chair

DEADLINES AND MILESTONES

Abstract and Summary Submissions Deadline:
16 March 2022

Author Notifications:
April 2022

Advance Registration Deadline:
13 June 2022

Hotel Reservations Deadline:
14 June 2022

Postdeadline Paper Submission Deadline:
16 June 2022

Early Access to Technical Digest Papers:
01 July 2022

Meeting:
11 - 15 July 2022

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Accelerate your aspirations.

Present at an Optica meeting to support your professional goals.

All paper submissions are carefully peer-reviewed to ensure a high-quality technical program on emerging topics; and as such, presenting at the meeting is a mark of professional excellence.

As a presenter, you participate in a comprehensive technical program that includes distinguished experts representing the finest institutions worldwide. As an attendee, you have invaluable opportunities to engage with other presenters and participants in one-on-one, in-depth interactions.

Get Published

Accepted and presented papers are published on the Society's publishing platform. Optica Publishing Group further supports the visibility of your work by indexing in Ei Compendex, Scopus and Google Scholar.

Choose How You Present

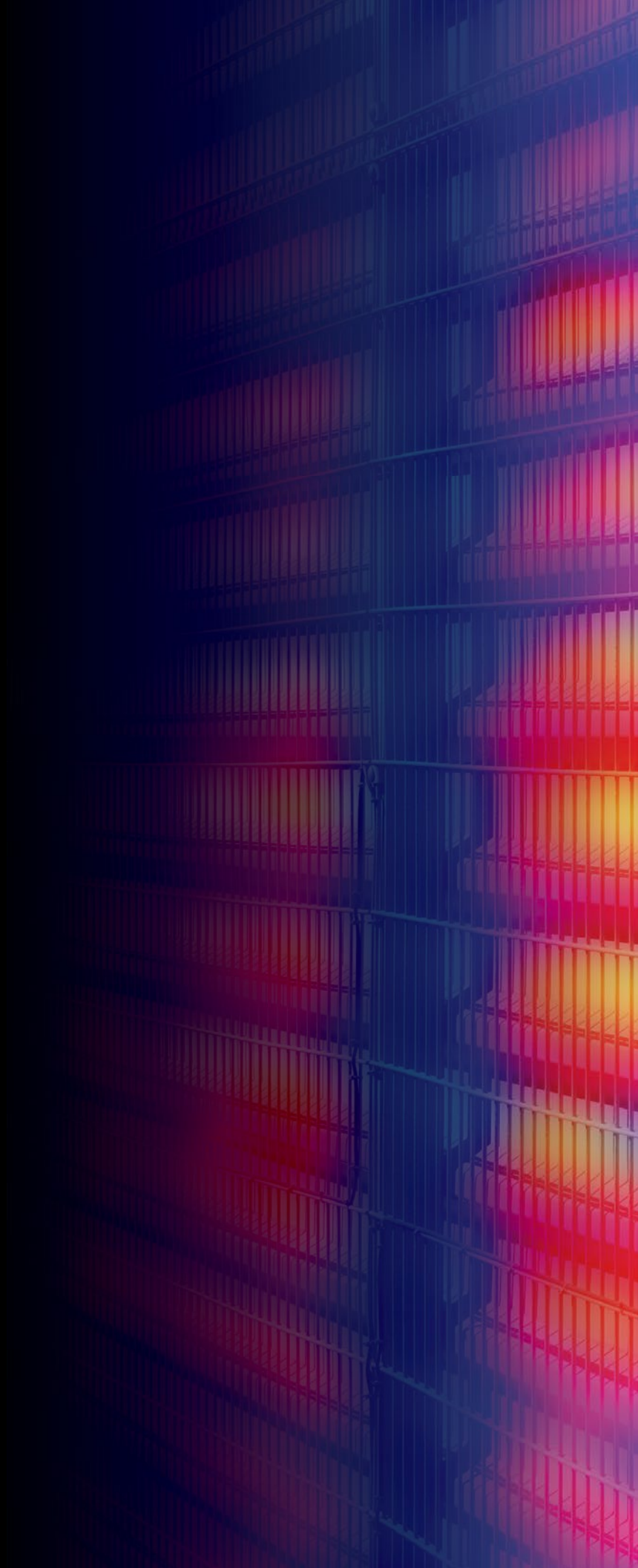
Imaging and Applied Optics Congress and Optical Sensors and Sensing Congress will be presented in a hybrid format, comprised of in-person and virtual talks. In a year of transition, we offer flexible presentation options that allow you to participate in the format most convenient for you.

Submit your research for consideration.
optica.org/ImagingOPC

Contact Us

Optica provides customer service weekdays from 08:30 to 18:00 in the US Eastern Time Zone.

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