Call for Papers and Posters

World’s Premier Platform for Breakthrough Laser Solutions ICALEO® brings together the leaders and experts in the field of laser material interaction, providing the world’s premier platform for sharing new ideas and discovering solutions.

Abstract Submission Deadline: April 30, 2020
For more information visit www.icaleo.org or email icaleo@lia.org.

Peer Reviewed Papers:
Submitters can select the option to have their technical paper reviewed by a blind peer review process. The peer review panel will look for quality of the research, relevance and significance of the findings. Selected papers will be identified as such in the ICALEO® 2020 Congress Proceedings and published in the Journal of Laser Applications (JLA).
LASER ADDITIVE MANUFACTURING TRACK
With new suppliers and devices entering the market daily, and a greater range of materials and material suppliers, Laser Additive Manufacturing is one of the highest growth areas within manufacturing globally. The Laser Additive Manufacturing track shines a spotlight on the latest techniques in additive manufacturing—from part design and process chain to finished product. Don’t miss out!

• 3D Printing of Components & Characterization
• Process Modeling
• Process Control & Monitoring
• Post Processing
• Specialized Materials
• Specialized Processes

LASER MACROPROCESSING TRACK
The Macroprocessing track includes some of the most prolific laser processing applications. Although these applications have been widely adopted, researchers and industry are continually innovating to provide new techniques and novel technologies to improve macro materials processing. Discuss the results of your research and testing with your peers in these macroscopic specialized sessions.

• Cutting
• Welding
• Drilling
• Cladding
• Beam Shaping
• Optics and Sources
• Process Control and Monitoring
• Advanced Machining
• Forming & Cleaning
• Surface Modification
• Process Modeling

LASER MICROPROCESSING TRACK
The Microprocessing track will consist of papers featuring a wide spectrum of applications and innovative equipment for materials processing in microscales. The presentations will introduce the latest and greatest advancements in their respective fields, presented by world leading companies and research organizations.

APPLICATIONS
• Spatial & Temporal Pulse Shaping
• Integrated Optics
• Solar Cells and Optoelectronic Components
• MEMS Fabrication

PROCESSES
• Laser Micro-ablation
• Nonlinear & Near-field Optical Processes
• Two-photon Processes
• Ultrafast Laser Processes
• Surface Modification & Preparation
• Micromachining
• Process Analysis & Simulation Models
• Glass Processing

SYSTEMS
• Beam Delivery Systems, Scanning Optics, & Motion Control
• CW and Nanosecond Lasers
• Picosecond & Femtosecond Lasers
• UV / VUV & EUV Sources

ICALEO TECHNICAL SESSIONS:
*Submissions not limited to the topics below.
NANOMANUFACTURING TRACK
The Nanomanufacturing track will highlight research in emerging nanomanufacturing technologies in 3D micro/nanomachining, 2-photon lithography, digital fabrication, nanoparticle formation, surface nanostructuring and laser assisted growth and epitaxy. Don’t be afraid to focus on small applications with huge impact in these Nano centric discussions.

APPLICATIONS
- Cognitive Devices
- Imaging Devices
- Laser Interactions with Biomolecules
- Bio-sensors
- Nanoelectronics

MACHINING
- Holography & Interferometry
- Maskless & Soft Lithography
- Laser Nano-ablation
- Nanofiber Electrospinning
- Nanoxerography
- Near Field Scanning
- Optical Methods

FRONTIERS IN LASER APPLICATIONS TRACK
The Frontier in Applications track explores cutting edge new applications of lasers, at the frontier of research and industry. From environment to medical, advanced instrumentation to extreme light sources, space to surgery, connect with all the experts attending ICALEO to present your work and outline the future of laser applications. Among, but not limited to the topics of interest:

ADVANCED LASER APPLICATIONS
- Optics and laser systems for Space Exploration
- Quantum applications (cryptography, sensing, computing,...)

ADVANCED LASER SOURCES
- EUV and XUV sources and their applications
- High power lasers and their applications
- Innovative laser sources

Medical sensing and diagnostics
- Medical therapeutics applications of lasers
- Environmental sensing and monitoring

Submission Info
Submissions should contain original, recent, unpublished results of application research, development, or implementation. Product endorsement papers will not be accepted. Be prepared to secure travel funding and authorization as soon as possible. LIA will happily provide invitation and visa letters upon request. Travel and accommodation funding is not available through LIA.

Manuscript deadlines must be strictly observed. Late manuscripts will not be published in the proceedings.
Poster Presentation Gallery:
An alternative option for submitting authors, are poster presentations. Poster presenters are eligible for peer review and submitted manuscripts will be included in the ICALEO Proceedings. This is an excellent opportunity for networking and the sharing of ideas. Spotlight your work with four full days of exposure.

Annual ICALEO Student Paper Award and Poster Presentation Contests:
These prestigious annual awards are presented to the best that ICALEO has to offer. Cash prize awards will be presented to 1st, 2nd and 3rd place winners. Additionally, winning papers will also be considered for submission to the Journal of Laser Applications for further peer review and publication. Presentations will be judged by an international panel on the following criteria:
- Originality of Topic / Material Presented
- Scientific and Technical Merit / Impact
- Clarity of Presentation (Oral & Visual)

Important Dates:
- Abstract Submission Deadline: April 30, 2020
- Acceptance Notification: May 22, 2020
- Manuscript Submission Deadlines:
  - Peer Reviewed Papers: June 15, 2020
  - Non-peer Reviewed Papers: August 17, 2020
- Speaker Registration & Payment Due: August 17, 2020

These are updated, extended deadlines.

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