LASER DAMAGE CALL FOR PAPERS

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13 – 16 September 2020
Hilton Garden Inn
Rochester, New York, USA

Submit your abstract and present at the leading forum for the exchange of information on the physics and technology of materials for high-power, high-energy lasers

MJ Soileau Best Student Paper Award
1st Place Best Student Presentation
Single-shot femtosecond laser-induced damage and ablation of HfO2/SiO2-based optical thin films: A comparison between five-cycle pulses and 110 fs pulses
[11173-25]

Noah Talisa, Michael Tripepi, Abdallah Al-Shafey, Brandon Harris, Jacob Krebs, The Ohio State Univ. (USA); Aaron Davenport, Emmett Randel, Carmen S. Menoni, Colorado State Univ. (USA); Enam A. Chowdhury, The Ohio State Univ. (USA)

QUESTIONS?
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Laser Damage
CALL FOR PAPERS

Share your research at
Laser Damage 2020

The premier conference for high-power/high-energy lasers, materials & thin films

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INTERNATIONAL PROGRAM COMMITTEE
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LASER DAMAGE 2019 AWARDS
Alexander Glass Best Oral Presentation Award
1st Place Best Oral Presentation
Non-localized creation of high-fluence precursors by 351-nm laser exposure
[11173-44]

David Cross, Christopher W. Carr, Lawrence Livermore National Lab. (USA)

Arthur Guenther Best Poster Award
1st Place Best Poster Presentation
Direct comparison of laser-induced damage threshold testing protocols on dielectric mirrors: effect of nanosecond laser pulse shape at NIR and UV wavelengths
[11173-42]

Ruta Pakalnyte, Vilnius Univ. (Lithuania); Egidijus Pupka, LIDARIS Ltd. (Lithuania); Andrius Melninkaitis, Vilnius Univ. (Lithuania)

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Klaus Mann, Gottingen e.V. (Germany)
Andrius Melninkaitis, Vilnius Univ. (Lithuania)
Jean-Yves Notoli, Instut Fresnel (France)
Raula A. Negrea, Lawrence Livermore National Lab. (USA)
Semyon Papernov, Lab. for Laser Energetics (USA)
Jonathan Phillips, STFC Rutherford Appleton Lab. (United Kingdom)
Wolfgang Rudolph, The Univ. of New Mexico (USA)
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Laser Damage 2020
SHARE YOUR RESEARCH AT

Conference Call for Papers

Submit abstracts by 18 March 2020
Plan to Participate
The 25th Annual Laser Damage Symposium also known as Symposium on Optical Materials for High Power Lasers (aka Boulder Damage Symposium) will be held from September 13 through 16, 2020 in the Hilton Garden Inn / University and Medical Center in Livermore, CA (USA). This meeting continues to be the leading forum for the exchange of information on the physics and materials of high-power and high-energy lasers. The series of conference proceedings has grown over the 50-year history of the conference to be a comprehensive source of information on optics for lasers and includes topics on laser-induced damage mechanisms, materials and thin film preparation, durability, properties modeling, and damage resistant fabrication. This symposium will start with a kick-off event – Sunday Evening Tutorial, will host a Plenary Session, a featured Mini-Symposium, and Thin-Film Laser-Damage Competition. As usual, it will include both poster and oral presentations with no parallel sessions. Since 2012, selected papers presented at this Symposium are published in special sections of Optical Engineering – one of major journals published by SPIE. The Special Section on Laser Damage V is planned for March 2021: https://www.spiedigitallibrary.org/journals. Submissions are due by July 1, 2020 and can be done via SPIE manuscript submission portal.

Distinguished international researchers in the field of optics for high-power/high-energy lasers will present plenary and invited talks. Submissions are solicited for the four core special sections, Plenary Session, and the Mini-Symposium.

We welcome your participation in this meeting by submitting your abstract(s) and encourage your colleagues to do the same.

PHOTONIC BANDGAP MATERIALS
- High-power fiber lasers
- Fibers for high-power laser applications
- Thin-film layers
- Multi-layer thin films
- Nonlinear optical and laser materials
- Laser damage in new high-power laser systems

APPLICATIONS OF LASER DAMAGE:
- EUV
- Mirrors
- Nanotechnologies of optical materials and gratings

TUTORIAL AND DISCUSSION:
- Overview of process to prepare substrates and coatings

PLANE-INDUCED DAMAGE ISSUES:
- Measurement protocols
- Materials characterization
- Contamination of optical components
- Surface and bulk defects
- Thermal management of high-power laser systems

MINI-SYMPOSIUM ON OPTICAL MATERIALS FOR HIGH-ENERGY LASERS:
- Overview of broad range of topics related to optical glasses and composites
- Fundamentals of thin film design
- Critical issues in selecting optical thin films for high-energy laser applications
- Topics include laser damage, irradiation dynamics, and laser processing of materials. Target audience includes students, scientists, engineers, and technology developers.

MODERATORS:
- Ruxin Li, Livermore National Laboratory
- Peter Schunemann, Lawrence Livermore National Laboratory
- Jason DeGroote Nelson, Lawrence Livermore National Laboratory

THIN FILM COMPETITION:
- 532-nm Mirror Thin Film Damage Competition
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SAMHAIWES:
- Damage to the bulk of transparent optical material can occur in amorphous, polymeric, polycrystalline or crystalline materials. Researchers into, and manufacturers of, these materials have continually been increasing the fluence of optical energy to high power continuous wave laser optics, for example, multiphoton effects, nonlinear refractive index, and self-focusing. This area also includes modeling, to nonlinear propagation. Emphasis is on nonlinear behavior; for example, multiphoton effects, nonlinear index, and self-focusing. This area also includes modeling, for example, multiphoton effects, nonlinear glass and laser damage.