

ALPS 2022

- Novel optical materials / structure and applications
- High average power lasers and applications
- High peak power lasers, high pulse energy lasers and applications
- Novel solid state / fiber / diode lasers and applications
- Short wavelength light sources and applications
- Terahertz devices, nonlinear optics and applications
- Novel optical devices, metamaterials, structure and applications
- Optical devices and techniques for bio and medical applications
- Optical frequency combs / frequency stabilized lasers and applications
- Quantum optics and their applications

HEDS 2022

- Dynamic and static high pressure
- Warm dense matter
- Simulation and modeling
- Planetary science
- Material sciences and applications
- Facility, diagnostics, and other technological advances

ICNN 2022

- Fundamentals of light matter interaction in nanostructures
- Silicon photonics
- Bio-photonics
- Semiconductor nano-scale devices
- Quantum dots and nanowires
- Photonic crystals
- Near-field optics
- Quantum optics and quantum information technology
- Spintronics
- Plasmonics

- Metamaterials
- Nanolasers
- Solar cells
- Quantum well, quantum dot and quantum cascade lasers
- Integrated photonic circuits

IP 2022

- Optical computing
- Digital optics
- Nanophotonic information system
- Optical biomimetic computing
- Optical cryptology
- Holography and holography art
- Computer-generated holography
- Electronic holography
- 3D display
- Volumetric display
- Holographic display
- Aerial display
- Head-up display
- Near-to-eye display
- Novel display
- Light-field imaging and display
- Digital holography
- Quantitative phase imaging
- Optical, optoelectronic, optofluidic, and imaging devices
- Computational imaging
- Compressive imaging
- Structured illumination imaging
- Novel imaging
- Novel camera
- Ptychography
- Full-field optical coherent tomography
- Imaging in scattered medium
- Digital phase conjugation
- Novel image acquisition
- Pump-probe imaging
- Ultrafast imaging
- X-ray imaging

- THz imaging
- Adaptive optics
- Optical memory
- Holographic data storage
- Spatial light modulator
- Vision engineering
- Appearance control
- Projection mapping
- AI (artificial intelligence)
- Deep-learning for imaging and image recognition
- Sparse coding
- VR (virtual reality)
- AR (augmented reality)
- Optical and optoelectronic information processing

LDC 2022

- Light sources and components
- Imaging / Lighting
- Smart Systems including visible light communication
- AR, MR, VR, ... XR technologies
- Laser Applications for Automotive
- Novel and emerging technologies

LEDIA 2022

- Light Emitting Diodes
- Laser Diodes
- Photodetectors and Solar Cells
- Epitaxial Growths
- Extended Wavelength Devices
- Novel Fabrication Processes
- Novel Characterization Methods
- Novel Materials and Devices
- Industrial Application

LIC 2022

- Tiny integrated lasers
- Optical materials for tiny integrated lasers
- Laser induced phenomena by power miniature lasers

- Application of tiny integrated lasers

LSC 2022

- New laser and synchrotron sources
- Developments on laser and synchrotron instrumentation
- Recent studies on laser and synchrotron radiation
- Experimental techniques and utilization of lasers and synchrotrons
- Applications of laser and synchrotron on materials science and biological sciences

LSSE 2022

- Anti-COVID-19
- Agri-Photonics
- Space Technology
- Industrial Application

OMC 2022

- Structured optical fields, including beam shaping, polarization control, pulse shaping, frequency extension, and ultrafast laser technologies
- Optical trapping and manipulation, including optical tweezer, holographic optical manipulation, plasmon trapping, multi-photon trapping, and atom trapping and cooling
- Advanced devices and instruments, including spatial light modulator, adaptive optics, and near-field optical devices
- Applications including structured material processing, single molecule trapping, biophotonics, metamaterials, quantum communications, and selective control of chemical reaction
- Novel approaches, including novel interaction between optical fields and materials on nano-scale, novel regimes of spin-orbit interaction, and quantum control of molecular dynamics

OPTM 2022

- 3D profilometry Technology (Japan)
- Polarimetry/ellipsometry
- Novel optical testing
- Surface inspection methods and applications
- Absolute testing for metrology
- Application of interferometric techniques
- Machine/robot vision methods, architectures and applications
- Lightning methods and system for inspection
- 3D data acquisition
- Freeform testing
- Scatterometry
- Unconventional microscope for inspection
- Super-high accurate measurement for smooth surfaces
- Micro- and nano-scale measurement methods
- Structured light methods, fringe
- Projection measurement and applications
- Phase shifting methods applied to industrial inspection
- Mechanic-optics and photonics for metrology and inspection
- Optical inspection by optical comb
- Super resolution microscope for inspection
- Spherical and aspherical measurements
- Color metrology of manufactured goods
- On-line and process control measurements
- On-machine tool measurements of shape and finish
- High-resolution and high-speed inspection applications
- Novel interferometry

OWPT 2022

- Devices and components
- Systems and subsystems
- Applications
- Others (Standardization, Regulations, and Novel / Emerging topic related to the OWPT conference)

SI-Through 2022

- Imaging through scattering media
- Imaging through fluctuating media
- Wavefront sensing
- Wavefront shaping
- Digital phase conjugation
- Transmission / Reflection matrix approaches
- Scattering and fluctuation theory
- Scattering and fluctuation modeling
- Diffuse optical imaging
- Computational imaging
- Single-pixel imaging
- Ghost imaging
- Deep learning and machine learning
- Non-line-of-sight imaging
- Deep live-cell imaging
- Deep optical cell manipulation
- Live brain imaging
- Ultrasound imaging
- Photoacoustic imaging
- Nondestructive testing
- Adaptive optics
- Observational astronomy
- High-contrast imaging of exoplanet
- Spatial light modulation and deep biometry
- Next-generation communications
- Telecommunication
- Spatial information communication
- Modulation and coding
- Pointing, acquisition, and tracking
- Atmospheric propagation
- Transmitters and receivers for communication
- Terrestrial networks
- Quantum communication
- Other related areas

SLPC 2022

- Cutting
- Welding
- Additive Manufacturing / Selective Laser Melting

- Cladding / Laser Metal Deposition
- Functional Surface Manufacturing
- Laser Peening and Related Phenomena
- Laser Polishing / Cleaning
- Micro Nano Processing
- Ultrashort Pulsed Laser Processing
- Advanced Lasers and Optical Technologies
- CFRP Processing
- Industrial Applications
- AI / CPS Laser Processing
- High Power Blue and Green Laser
- Others

XOPT 2022

- X-ray optical components
- Methods / Applications
- Others (X-ray sources, X-ray detectors)