

OPIC2023 SCOPE

ALPS2023

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

BISC2023

medical and biological imaging instrumentation and techniques

optogenetics

advanced microscopy

advanced endoscopy

super resolution in biomedical imaging and sensing

computational imaging in biomedical imaging and sensing

adaptive optics in biomedical imaging and sensing

structured illumination in biomedical imaging and sensing

interferometry and holography in biology and medicine

optical coherence tomography

diffuse optical tomography

digital holography

quantitative phase imaging

photoacoustic imaging

multimodal imaging and sensing

optical biopsy

spectroscopic imaging and sensing

multispectral imaging and sensing

scattering imaging

fluorescence imaging

molecular imaging

terahertz sensing

optical fibers and sensors for biomedicine

multimodality optical diagnostic systems

CPS-SNAP2023

Core Technologies for Sensing/ Network/ AI

Applications and use cases

Photonics Technologies

HEDS2023

Dynamic and static high pressure

Warm dense matter

Simulation and modeling

Planetary science

Material sciences and applications

Facility, diagnostics, and other technological advances

ICNN2023

Fundamentals of light matter interaction in nanostructures

Silicon photonics

Semiconductor nano-scale devices

Quantum dots and nanowires

Quantum well, quantum dot and quantum cascade lasers

Quantum optics and quantum information technology

Photonic crystals

Spintronics

Nanolasers

Near-field optics

Plasmonics

Solar cells

Bio-photonics

Metamaterials

Integrated photonic circuits

LDC2023

Light Sources and Components

Imaging / Lighting

Smart Systems

Metaverse Technologies including AR, MR, VR, ... XR

Laser Applications for Automotive

Novel and Emerging Technologies

LSC 2023

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

LSSE2023

Anti-COVID-19 (Examination of infection, Sterilization)

Agri-photonics (Smart agriculture, Laser plant factory, Laser sense organ)

Space technology (Laser debris deorbit, UV imaging)

Industrial application (Extreme condition, Robotics, Processing, Remote sensing, Laser-induced breakdown spectroscopy (LIBS))

OMC2023

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

fundamental researches and advanced technologies enabled by structured materials, such as metamaterials, metasurfaces, and photonic crystals

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 nanoscale, novel regimes of spin-orbit interaction, and quantum control of molecular dynamics

OPTM2023

3D profilometry

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

lighting methods and systems for inspection

dynamic measurement

unique optical systems for inspection and measurements

2D and 3D machine vision methods and applications

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

OWPT2023

Devices and components

Systems and subsystem

Applications

Others (Standardization, Regulations, and Novel/ emerging topic related to the OWPT conference.)

TILA-LIC2022

TINNY INTEGRATED LASERS

OPTICAL MATERIALS FOR TINNY INTEGRATED LASERS

LASER INDUCED PHENOMENA BY POWER MINIATURE LASERS

APPLICATION OF TINY INTEGRATED LASERS

GIANT MICRO-PHOTONICS

XOPT2023

X-ray optical components

Methods/ applications

Others (X-ray sources, X-ray detectors)