



Symposia

1. **Green Photonics**
2. **Super Resolution**

CLEO Pacific Rim

1. **Applied nonlinear optics**
(topics include but are not limited to: quadratic, cubic and higher-order nonlinear processes, stimulated scattering)
2. **Fiber amplifiers, lasers, sensors and devices**
(topics include, but are not limited to: fiber lasers, CW and pulsed, Raman amplifiers, nonlinear effects in fibers, fiber sensors, fiber design, materials, fabrication, and characterization)
3. **High Power Laser Technology and High Energy Density Physics**
(topics include but are not limited to: high-power laser design and construction, the physics of matter and radiation under extreme energy density conditions)
4. **Information Optics, Optical Storage and Displays**
(topics include but are not limited to: optical information processing, optical data storage, optical displays)
5. **Infrared and THz technology, and Astrophotonics**
(topics include, but are not limited to: sources and systems providing access to the far-infrared region of the spectrum, in the approximate range from 200 GHz to 10 THz, applications in astrophotonics)
6. **Integrated and Guided-Wave Optics and Thin Film Optics**
(topics include but are not limited to: integrated optics, waveguides, thin films)
7. **Laser Chemistry, Biophotonics and Applications**
(topics include but are not limited to: biomedical optics, laser medical diagnostics and therapeutics, optofluidics, state selective chemistry, time resolved chemistry, spectroscopy, chemical dynamics)
8. **Laser Metrology and Remote Sensing**
(topics include, but are not limited to: optical devices, instruments, and technologies for precision measurements, optical standards, remote sensing)
9. **Laser Processing, Laser Microfabrication, and Industrial Applications**
(topics include but are not limited to: laser machining, laser materials modification, laser deposition)



10. Optical Communications and Networking

(topics include, but are not limited to: long- and short-haul fiber-optic communication systems and networks; fiber nonlinearities and other transmission impairments; advanced optical modulation formats)

11. Semiconductor and Electro-optic Devices

(topics include but are not limited to: semiconductor lasers emitting at any frequency, laser arrays, semiconductor laser modeling, modulators and other EO devices)

12. Solid-State Laser and Other Lasers, and Laser Materials

(topics include, but are not limited to: spectroscopic investigations of laser media, lasers emitting at any wavelengths, modeling of lasers)

Joint CPR / IQEC

1. Nanophotonics

(topics include but are not limited to: plasmonics, near-field optics, metamaterials and nanomechanics)

2. Ultrafast Laser Science

(topics include but are not limited to: attosecond and femtosecond processes, high field physics, high harmonic generation)

3. Ultrafast Optics and Photonics

(topics include but are not limited to: ultrafast lasers, attosecond and femtosecond pulse generation, photonic switching)

IQEC

1. Cold Atoms and Molecules

(topics include but are not limited to: laser cooling and trapping, cold molecule formation, Bose-Einstein condensation, degenerate Fermi gases, atom optics, quantum emulation with cold atoms, ion trapping)

2. Fundamentals of Nonlinear Optics

(topics include but are not limited to: dynamics, instabilities and pattern formation)

3. Precision Measurements and Fundamental Tests

(topics include but are not limited to: ultra-high resolution spectroscopy, atomic clocks, variation of fundamental constants, measurement tests of physical principles)

4. Quantum Information and Cryptography

(topics include but are not limited to: quantum computing in atoms and ions, optical quantum computing, quantum cryptography, quantum control, quantum repeaters)



5. **Quantum Optics** (topics include but are not limited to: optical entanglement, quantum imaging, single photon devices)

6. **Quantum Science in Atoms, Molecules and Solids**
(topics include but are not limited to: information storage, slow light, coherent control of matter)