Index Terms/Keywords for SPIE Journals

(April 2010)

aberrations
absorption
acoustics
acousto-optics
active optics
actuators
adaptive optics
aerosols
airglow
alignment
amplifiers
anisotropy
annealing
antennas
apertures
apodization
architectures
argon
arrays
artificial intelligence
aspherics
associative memory
astronomy
asynchronous transfer mode
atmospheres
atmospheric optics
atoms
attenuation
attenuators
auroras
axicons

backgrounds
backscattering
bandwidth
beams
beamsplitters
binary data
biology
biomedical optics
biophotonics
birefringence
bistability
blackbodies
book reviews
bore holes
Bragg cells
Bragg gratings

calorimetry
cameras
carbon
carbon dioxide
carbon dioxide lasers
carrier dynamics
cathode ray tubes
caustics
cells
channel waveguides
chaos
charge-coupled devices
charge-coupled-device imagers
chemistry
circuit board testing
clocks
clouds
coatings
coded apertures
coding
coherence
coherent optical systems
coherent optics
collimation
collimators
color
color vision
colorimetry
combustion
computed tomography
computer graphics
computer vision
computer-generated holograms
computers
concentrators
confocal optics
contours
convolution
cooling
correlation
correlators
couplers
crystals

data compression
data processing
data recording
data storage
deconvolution
deflectometry
deflectors
delay effects
deposition
detection
detector arrays
detectors
diamond
dichroism
diffraction
diffractive optical elements
diffractive optics
diffusers
diffusion
digital imaging
digital processing
digital recording
diode lasers
diodes
dispersion
displays
distortion
document imaging
Doppler effect
dye lasers

earth
edges
electro-optics
electromagnetic waves
electron beams
electron microscopy
electronic imaging
electronics
electrons
electrophotography
electrostriction
ellipsometry
emission
encoders
encoding
endoscopy
engineering
epitaxy
erbium lasers
etalons
etching
excimer lasers
excitons
extinction
extreme ultraviolet

Fabry-Perot
facsimile systems
far infrared
far ultraviolet
feedback
femtosecond phenomena
ferroelectrics
fiber applications
fiber characteristics
fiber characterization
fiber lasers
fiber optic applications
fiber optic sensors
fiber optics
films

filtering
filters
flames
flows
fluorescence
fluorescence spectroscopy
focal plane arrays
focus
fog
forward-looking infrared
four-wave mixing
Fourier optics
Fourier spectroscopy
Fourier transforms
fractals
free-electron lasers
frequency conversion
frequency generation
fringe analysis

gallium arsenide
gallium arsenide compounds
gallium arsenide lasers
gamma rays
gas lasers
gases
Gaussian beams
geometric optics
germanium
glare
glass
gradient index
gratings
grazing incidence
guided waves
gyroscopes

halftones
helium-neon lasers
heterodyning
heterojunctions
heterostructures
high heat flux
high-power lasers
history
hole burning
holograms
holographic optical elements
holography
holography applications
homodyning
Hough transforms
hyperspectral imaging

illumination
image acquisition/recording
image analysis
image compression
image enhancement
image evaluation
image formation
image intensifiers
image processing
image quality
image reconstruction
image recording
image restoration
image segmentation
image sensors
image storage
image transmission
image tubes
image understanding
imaging
imaging coherence
imaging systems
information processing
information storage
infrared
infrared detectors
infrared imagers
infrared imaging
infrared lasers
infrared space observatory
infrared spectroscopy
infrared systems
integrated circuits
integrated optics
interconnects
interference
interferometers
interferometry
inverse optics
inverse problems
ionization
ionization spectroscopy
ions
isolators
isotope separation

joint transforms

Kerr effect
kinoforms

laser applications
laser Doppler velocimetry
laser materials modification
laser safety
laser spectroscopy
laser-induced damage
laser-induced fluorescence
lasers
lasers in medicine
lenses
letters
lidar
light
light-emitting diodes
liquid crystals
lithium niobate
lithography
local area networks
logic
logic devices
luminescence

machine vision
magnetic properties
magnetic resonance imaging
magneto-optics
magnetometers
magnetosphere
mapping
masks
materials
mathematical morphology
matrices
matrix multiplication
medical imaging
medicine
mercury cadmium telluride
metamaterials
meteorology
methane
metrology
micro-optics
microchannel plates
microelectromechanical systems
microfabrication
microfluidics
microlithography
microscopes
microscopy
microwaves
mie theory
millimeter waves
mirrors
missiles
modes
modulation
modulation transfer functions
modulators
moire
moire patterns
molecular spectroscopy
molecules
monochromators
mosaic detectors
motion
motion detection
multilayers
multimedia
multiphoton processes
multiple scattering
multiplexers
multiplexing
multispectral imaging

nanophotonics
neodymium lasers
networks
neural networks

nitrogen lasers
noise
nondestructive testing
nonimpact printing
nonlinear optics
nonlinear image processing

oceanography
ophthalmology
optical activity
optical arrays
optical character recognition
optical circuits
optical communications
optical computers
optical computing
optical constants
optical design
optical devices
optical disks
optical engineering
optical fabrication
optical inspection
optical interconnects
optical limiting
optical logic
optical materials
optical networks
optical processing
optical properties
optical recording
optical shop
optical storage
optical systems
optical testing
optical transfer functions
optics
optoelectronic packaging
optoelectronics
optomechanical design
organic materials
oscillators
ozone

parallel processing
particle sizing
particles
patents
pattern recognition
phase
phase compensation
phase conjugation
phase contrast
phase measurement
phase modulation
phase retrieval
phase shifts
phase-only filters
phased arrays
phosphorescence
photoacoustic spectroscopy
photoacoustics
photoconductors
photodetection
photodetectors
photodiodes
photoelasticity
photoelectric effect
photogrammetry
photography
photointerpretation
photoluminescence
photomasks
photometry
photomultipliers
photonics
photons
photopolymers
photorefraction
photoresists
photosynthesis
phototransistors
photovoltaic systems
picosecond phenomena
piezoelectric effect
planets
plasmas
plasmonics
point spread functions
pointing
polarimeters
polarimetry
polarization
polarizers
polishing
pollution
polymers
printing
prisms
profiles
profiling
projection systems
projectors
propagation
pulse shaping
pulses
pyrometers
pyrometry

quantization
quantum dots
quantum efficiency
quantum electronics
quantum optics
quantum wells
quartz

radar
radiation
radiative transfer
radiography
radiology
radiometers
radiometry
radon transform
Raman effect
Raman spectroscopy
ranging
rasters
Rayleigh scattering
real-time imaging
receivers
reflectance
reflection
reflectivity
reflectometers
reflectometry
reflectors
refractive index
refractometry
relativity
remote sensing
resolution
resonators
retarders
reticles
retroreflection
retroreflectors
robot vision
robotics
Ronchi rulings
roughness
ruby lasers

satellites
scanners
scanning
scanning microscopy
scattering
schlieren techniques
scintillation
second-harmonic generation
segmentation
semiconductor lasers
semiconductors
sensors
shearography
shock
shutters
signal detection
signal processing
signal-to-noise ratio
silica
silicon
simulations
single-mode fibers
smart materials
smart structures
sol-gels
solar cells
solar energy
solid state lasers
solid state lighting

sources
space optics
space station optics
spatial filtering
spatial filters
spatial frequencies
spatial light modulators
speckle
speckle interferometry
speckle phenomena
spectrographs
spectrometers
spectrometry
spectrophotometers
spectrophotometry
spectroscopy
sputtering
standards
staring arrays
statistical optics
stereoscopy
strain analysis
stray light
stress analysis
submicron lithography
sun
superconductivity
superlattices
surface plasmons
surfaces
switches
switching
symbolic substitution
synchrotron radiation
synthetic aperture radar
synthetic apertures

targets
technology
telescopes
television
temperature
terahertz
thermal effects
thermal imaging
thermo-optics
thermography
thermosphere
thin films
three dimensions
tissues
tomography
tracking
transducers
transforms
transistors
transmission
transmittance
tunable filters
tunable lasers
turbulence
two-wave mixing

ultrafast phenomena
ultrasonics
ultraviolet
ultraviolet spectroscopy
uranium

vacuum ultraviolet
vapor deposition
velocimetry
velocity
very large scale integration
vibration
vibration analysis
video
virtual reality
visibility
vision
visual communications
visual compression
volume holography

wafers
water
wavefront compensation
wavefront sensors
wavefronts
waveguide lasers
waveguides
wavelet transforms
wavelets
Wigner distribution functions
windows

x rays
x-ray lasers

Zeeman effect
zone plates
zoom lenses