

AAPM 2023

JULY 23–27 | HOUSTON, TX
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The ART OF SCIENCE
The SCIENCE OF CARE

KEYWORDS

3D
absolute dosimetry
acceptance testing
activation
adaptive sampling
aliasing
alpha-particles
amorphous selenium
amorphous silicon
anatomical models
angiography
angioplasty
anisotropy
arterial input function
artero-venous malformations
asymmetric fields
atherosclerosis
Auger electrons
autocorrelation function
backprojection
backscatter
Bayesian statistics
beam hardening
beam shaping
beta particles
bioeffect dose
bioelectromagnetics
biological dosimetry
bipartition models
blood flow
blood vessels
BMD
bone dosimetry
bone structure
bone-marrow transplantation
BPA
brachytherapy
brain
breast
CAD
calcifications
calibration
capture gamma rays
cavity theory
cell kinetics
cerebral vasculature
chamfer matching
chemical dosimetry
chest radiography
classifier design
clinical trials
Co-60
coherent scatter
coincidence counting
collapsed cone superposition
collection efficiency
collimation
color flow imaging
commissioning
compensators
Compton effect
computed radiography
computer animation
computer software
computer vision
cone-beam CT
conformal radiotherapy
contour extraction
contralateral subtraction
contrast
contrast agent
convolution
convolution/superposition
cost function
cross sections
cross validation
crosstalk
Cs-137
CT
CT colonography
cyclotrons
data acquisition
data interpolation
deadtime
decision theory
deconvolution
deformation
densitometry
density scaling
dental radiography
DEXA
diagnostic radiology
dialysis
DICOM-RT
diffusion
digital imaging
diodes
distal edge tracking
distortion
distributed computing
DMLC
Doppler ultrasound
dose
dose response
dose uniformity
dose volume histograms
dose-surface histogram
dosimetry
dosimetry protocols
DQE
DRRs
DSA
dual-energy imaging
dynamic wedge
echo planar imaging
edge detection
edge spread function

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effective dose
EGS4
elastic matching
electrocardiograms
electron contamination
electron optics
electron therapy
electronic disequilibrium
electronic portal imaging
EM reconstruction
energy dependence
energy fluence
energy imparted
energy spectrum
enhanced dynamic wedge
epithermal neutrons
equivalent fields
estimation theory
expectation maximization (EM)
exposure reduction
extracellular contrast agents
extra-focal radiation
extrapolation chamber
eye plaques
fast Fourier transformation
fast neutrons
fat suppression
FDG PET
feature extraction
feature selection
Fermi-Eyges theory
fetal dose
field shaping
film
filtration
finite element analysis
flat-panel imagers
flattening filters
flood-field uniformity
flow imaging
flow velocity
fluorescence
fluoroscopy
fractal analysis
functional imaging
fuzzy logic

gamma cameras
Gamma Knife
gating
Gd-DTPA
gel dosimeter
generalized cross-validation
generators
genetic algorithm
geometric distortion
geometric transformation
geometry factor
glomerular filtration rate
grids
group theory
hand radiography
harmonic imaging
HDR
head scatter
health physics
heart
heat transfer
heavy ions
helical CT
high-field NMR
high-resolution imaging
hot atoms
Hough spectrum
hyperthermia
hypoxia
I-125
image artifacts
image analysis
image compression
image correlation
image fusion
image guidance
image intensifier
image processing
image storage
image visualization
image-guided surgery
image-guided therapy
imaging theory
immobilization
in vivo dosimetry
inhomogeneity corrections

intensifying screens
intensity modulation
interface dosimetry
internal dosimetry
internal wedge
interstitial brachytherapy
interstitial hyperthermia
interventional MRI
intracavitary brachytherapy
intracavitary hyperthermia
intravascular brachytherapy
inverse planning
ion recombination
ionization chamber
ionizing radiation
IORT
Ir-192 source
irregular fields
joint space width
K x-ray fluorescence (KXRF)
k-space
lacunarity
lasers
lesion detectability
LET
LiF
light propagation
light scattering
line spread function
linear accelerator
linear attenuation coefficients
linear classifier
linear discriminant analysis
linear quadratic model
linear regression analysis
liquid ionization chamber
localization
lossy compression
low contrast detectability
low energy X-rays
low-dose CT
low-field MRI
LSO
lung
lung perfusion
macular degeneration

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magnetic fields
mammographic screening
mammography
Markov random fields
maximum likelihood estimation
MCNP
mechanical properties
megavoltage imaging
membrane permeability
metal/a-Se detector
microcalcifications
microdosimetry
microfocus x-ray
microlens arrays
microprocessors
microtrons
microwaves
mini MLC
minimum perceptible contrast
MIRD
mixed integer programming
MLC
modeling
monitor chambers
monitor unit calculations
monoclonal antibody therapy
Monte Carlo
morphology
MOSFET detector
motion artifacts
MR
MR elastography
MR microscopy
MRI
MRS
MTF
multiple scattering
multiple-echo sequence
mutual information
myocardial perfusion
near infrared
neutron capture therapy
noise
noise power spectrum
noise reduction
nonionizing radiation

nonlinear dynamics
nonlinear image warping
NTCP
nuclear data
nuclear interactions
nuclear medicine
numerical analysis
obliquity effect
observer performance
operations research
ophthalmic applicators
optical diffusion theory
optical dosimetry
optical imaging
optical modeling
optical tomography
optical transillumination
optimization
organ motion
osteoarthritis
osteoporosis
PACS
pair production
panoramic radiology
parallel computing
parametric imaging
patient movement
patient positioning
pattern recognition
Pd-103
PDT
pencil beam algorithms
penumbra
performance tests
perfusion imaging
permanent implants
personnel monitoring
perturbation factor
PET
phantoms
pharmacokinetic modeling
phase space
Phase contrast
phased arrays
photoacoustics
photoactivation

photogrammetry
photon detectors
photoneutrons
photostimulable phosphor
PIN photodiodes
planar imaging
point extraction
point-based registration
point-spread kernels
polarity effects
polarized light
polymer gels
portal imaging
positron emission mammography
preventative maintenance
prostate therapy
prosthetics
protons
proton NMR
proximity function
psychophysical analysis
pterygium
pulmonary embolism
pulmonary nodules
pulse sequences
pulsed brachytherapy
quality assurance
quality control
quantitative imaging
radial dose function
radiation detectors
radiation dosimetry
radiation effects
radiation protection
radiation risk
radiation therapy
radiation transport
radiobiology
radiochromic film
radioepidemiology
radiography
radioimmunotherapy
radiosensitivity
radiosurgery
RBE
reciprocity failure

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reconstruction
record and verify
registration
relaxation times
resolution
respiration
restenosis
rheumatoid arthritis
risk
ROC analysis
ROI fluoroscopy
rotational therapy
rotational tomography
scatter
scattering theory
scintillation cameras
scintillators
scintimammography
screen unsharpness
screen-film system
sectoring
seed localization
segmentation
semiconductor detectors
sensitometry
setup errors
setup verification
shape analysis
shape deformation
shielding
signal processing
simulation
skeletal radiography
small fields
SNR
SNVM
software
source strength
spatial filtering
spatial resolution
SPECT
spectrometry
spectroscopic imaging
specular microscopy
spiral CT
splines

statistical analysis
stents
stereolithography
stereology
stereomammography
stereotactic radiosurgery
stochastic processes
Stopping power
storage phosphors
stroke
structure analysis
surface dose
surface matching
Swank factor
synchrotron radiation
systematic errors
target localization
targeted radiotherapy
TBI
telerradiology
templates
temporal resolution
temporal subtraction
test objects
texture analysis
thermal ablation
thermal dosimetry
thermal neutrons
thermoacoustics
thermometry
thin film transistors
thresholding
TIFF
tissue characterization
tissue composition
tissue density
tissue equivalency
TLDs
tolerance doses
tomography
tomosynthesis
tomotherapy
tomotherapy
total skin irradiation
trabecular bone
transducers

transfer function
transformation
transit dosimetry
transmission measurements
transport equation
treatment planning
treatment techniques
treatment verification
tube loading
tumor control
tumor vasculature
turbid media
turbulence
ultrasonics
unsealed radionuclide
validation
vascular brachytherapy
vascular imaging
veiling glare
ventilation/perfusion
vessel tracking
videodensitometry
virtual wedge
visual perception
volume effects
warping
wavelets
wedges
Wiener spectrum
X rays
x-ray production
other