Topical Review

R193 Dosimetry for ion beam radiotherapy Christian P Karger, Oliver Jäkel, Hugo Palmans and Tatsuaki Kanai

Papers

6329 On developing B-spline registration algorithms for multi-core processors J A Shackleford, N Kandasamy and G C Sharp

6353 Projection correlation based view interpolation for cone beam CT: primary fluence restoration in scatter measurement with a moving beam stop array Hao Yan, Xuanqin Mou, Shaojie Tang, Qiong Xu and Maria Zankl

6377 Measurement of the 3D arterial wall strain tensor using intravascular B-mode ultrasound images: a feasibility study Yun Liang, Hui Zhu and Morton H Friedman

6395 An optimum method for pulsed high intensity focused ultrasound treatment of large volumes using the InSightec ExAblate® 2000 system B E O'Neill, C Karmonik and K C P Li

6411 Dual energy CT using slow kVp switching acquisition and prior image constrained compressed sensing Timothy P Szczykutowicz and Guang-Hong Chen

6431 Error estimation for perfusion parameters obtained using the two-compartment exchange model in dynamic contrast-enhanced MRI: a simulation study R Luypaert, S Sourbron, S Makkat and J de Mey

6445 Viscoelasticity-based MR elastography of skeletal muscle Dieter Klatt, Sebastian Papazoglou, Jürgen Braun and Ingolf Sack

6461 Human erythrocytes as nanoparticle carriers for magnetic particle imaging D E Markov, H Boeve, B Gleich, J Borgert, A Antonelli, C Sfara and M Magnani

6475 Comparison of anatomy-based, fluence-based and aperture-based treatment planning approaches for VMAT Min Rao, Daliang Cao, Fan Chen, Jinsong Ye, Vivek Mehta, Tony Wong and David Shepard

6491 Biomechanical-based image registration for head and neck radiation treatment Adil Al-Mayah, Joanne Moseley, Shannon Hunter, Mike Velec, Lily Chau, Stephen Breen and Kristy Brock

6501 Measuring flow-mediated dilation through transverse and longitudinal imaging: comparison and validation of methods Marianne J Stroz and Aaron Fenster
6515 Nonlinear least-squares modeling of 3D interaction position in a monolithic scintillator block Zhi Li, M Wedrowski, P Bruyndonckx and G Vandersteen

6533 Applying gold nanoparticles as tumor-vascular disrupting agents during brachytherapy: estimation of endothelial dose enhancement Wilfred Ngwa, G Mike Makrigiorgos and Ross I Berbeco

6549 Segmentation of mouse dynamic PET images using a multiphase level set method Jinxiu Cheng-Liao and Jinyi Qi

Notes

N495 FREE ARTICLE Intensity-modulated radiation therapy (IMRT) by a dynamic-jaws-only (DJO) technique in rotate-translate mode S Webb and G Poludniowski

N507 Thyroid volume measurement in external beam radiotherapy patients using CT imaging: correlation with clinical and anthropometric characteristics C Veres, J P Garsi, C Rubino, F Pouzoulet, F Bidault, J Chavaudra, A Bridier, M Ricard, I Ferreira, D Lefkopoulos, F de Vathaire and I Diallo

Book Review

6571 Handbook of Physics in Medicine and Biology Robert Splinter (Editor) (reviewed by Slavik Tabakov)

Corrigendum

6573 Inconsistencies in egsp (the EGSnr C++ class library) and in the SLAB module of BEAMnrc R Behrens