

\*趙自強副教授

所有發表期刊論文及專書

1. Pan CY, Huang YW, Cheng KH, Chao TC, Tung CJ (2014, Dec). Microdosimetry spectra and relative biological effectiveness of 15 and 30 MeV proton beams. *Applied Radiation and Isotopes*, (online available)
2. C. Y. Yeh , C. J. Tung , T. C. Chao , M. H. Lin and C. C. Lee (2014, Nov). A dual resolution measurement based Monte Carlo simulation technique for detailed dose analysis of small volume organs in the skull base region. *Radiation Physics and Chemistry*, 104(2014):389–392
3. Lee, CC; Wu, JF; Chang, KP; Chu, CH; Wey, SP; Liu, HL; Tung, CJ; Wu, SW; Chao, TC; (2014, Nov). The use of normoxic polymer gel for measuring dose Distributions of 1, 4 and 30mm Cones. *Radiation Physics and Chemistry*, 104(2014): 221–224.
4. C.Y. Yeh, C.J. Tung, C.C. Lee, M.H. Lin, T.C. Chao (2014, Apr). Measurement-based Monte Carlo Simulation of High Definition Dose Evaluation for Nasopharyngeal Cancer Patients Treated by using Intensity Modulated Radiation Therapy. *Radiation Measurements*, 71:333-337.
5. C. Y. Yeh, C. C. Lee, T. C. Chao, M. H. Lin, P. A. Lai, F. H. Liu and C. J. Tung (2014, Feb). Application of Measurement-based Monte Carlo Method in Nasopharyngeal Cancer Patients for Intensity Modulated Radiation Therapy. *Radiation Physics and Chemistry*, 95, 240-242.
6. Lee CC, Lee YJ, Tung CJ, Cheng HW, Chao TC\* (2014, Feb). MCNPX Simulation of Proton Dose Distribution in Homogeneous and CT Phantoms. *Radiation Physics and Chemistsry*, 95 (2014) 302–304.
7. Chao TC, Wang CC, Li JL, Li CY, Tung CJ (2012, Jan). Cellular- and micro-dosimetry of heterogeneously distributed tritium.. *Int J Radiat Biol.*, 88:151-7
8. Wang CC, Hsiao Y, Lee CC, Chao TC, Wang CC, Tung CJ (2012, Jan). Monte Carlo simulations of therapeutic proton beams for relative biological effectiveness of double-strand break. *Int J Radiat Biol.*, 88:158-63.
9. Chao TC, Kao YF, Lee CC, Tung CJ (2011, Dec). Dose assessment for chest X-ray examination based on a voxelised human model. *Radi. Meas.*, 46(12):2077-80.
10. Chao TC, Yu PC, Lee CC, Wu CJ, Tung CJ (2011, Dec). In vivo dosimetry with asymmetry and heterogeneity correction. *Radi. Meas.*, 46(12):1956-9
11. Cheng HW, Ho CJ, Lee CC, Tu SJ, Shih BY, Chao TC\* (2011, Dec). Development of a novel optical CT employing a laser to create a collimated line-source

- with a flat-top intensity distribution. *Radi. Meas.*, 46(12):1932-5.
- 12. Chu, WH; Lan, JH; Chao, TC; Lee, CC; Tung, CJ; (2011, Dec). Neutron spectrometry and dosimetry around 15 MV linac. *Radiation Measurements*, 46(12):1741–1744.
  - 13. Lee CC, Chen AM, Tung CJ, Chao TC\* (2011, Dec). Monte Carlo simulation of small field electron beams for small animal irradiation. *Radi. Meas.*, 46(12):2003-5
  - 14. Wu, SW; Chao, TC; Tung, CJ; Lin, MH; Lee, CC; (2011, Dec). MLC mediated beam hardening effects in IMRT. *Radiation Measurements*, 46(12):1989–1992.
  - 15. Yu, Pei-Chieh; Chao, Tsi-Chian; Tung, Chuan-Jong; Wu, Ching-Jung; Lee, Chung-Chi; (2011, Dec). Dose assessment for brachytherapy with Henschke applicator. *Radiation Measurements*, 46(12):2028–2030.
  - 16. Chao TC, Huang YS, Hsu FY, Hsiao Y, Lee CC and Tung CJ (2011, Feb). Cellular Dosimetry and Microdosimetry for Internal Electron Emitters. *Radiat. Prot. Dosim.*, 143 (2-4): 248-252
  - 17. Tung CJ, Yu PC, Chiu MC, Yeh CY, Lee CC, Chao TC\* (2010, Dec). Midline Dose Verification with Diode in vivo Dosimetry for External Photon Therapy of Head and Neck and Pelvis Cancers during Initial Large-Field Treatments. *Med. Dos.*, 35(4): 304-311
  - 18. Chen AE, Dai SJ, Chu ML, Lin CH, Teng PK, Wang CH, Chao TC, Lee CC, Tung CJ , Duh TS (2010, Nov). Beam profile monitoring system for proton therapy. *IEEE Nuclear Science Symposium Conference Record*, 440-2..
  - 19. Lin MH, Chao TC, Lee CC, Chang JTC, Tung CJ (2010, Jul). Tissue classifications in Monte Carlo simulations of patient dose for photon beam tumor treatments. *Nucl. Instr. and Meth. in Phys. Res. A*, 619(2010):393-6.
  - 20. Yu PC, Chao TC, Lee CC, Wu CJ, Tung CJ (2010, Jul). A Monte Carlo dosimetry study using Henschke applicator for cervical brachytherapy.. *Nucl. Instr. and Meth. in Phys. Res. A*, 619(2010): 411–4..
  - 21. Tu SJ, Hsieh HL, Chao TC (2010, Mar). Imaging properties of gold nanoparticles: CT number dependence study. *Progress in Biomedical Optics and Imaging*, v7622..
  - 22. Chao TC, Chen AM, Tu SJ, Tung CJ, Hong JH and Lee CC (2009, Sep). The Evaluation of 6 and 18 MeV Electron Beams for Small Animal Irradiation. *Phys. Med. Biol.*, 54(2009):5847-5860.
  - 23. Caracappa PF, Chao TC, and Xu XG (2009, Jun). A Study of Predicted Bone Marrow Distribution on Calculated Marrow Dose from External Radiation Exposures Using Two Sets of Image Data for the Same Individual. *Health*

- Phys.*, 96(6):661-74.
- 24. Liu CS, Tung CJ, Hu YH, Chou CM, Chao TC and Lee CC (2009, May). Calculations of Specific cellular doses for Low-Energy Electrons.. *Nucl. Instr. and Meth. in Phys. Res. B*, 267:1823-9.
  - 25. Lin MH\*, Chao TC\*, Lee CC, Tung CJ, Yeh CY, Hong JH (2009, Apr). Measurement-Based Monte Carlo Dose Calculation System for IMRT Pre-treatment and In-vivo Dose Verifications.. *Med. Phys.*, 36(4):1168-75.
  - 26. Tu SJ, Hsieh HL, Chao TC, and Lee CC (2009, Mar). Feasibility of using the micro CT imaging system as the conformal radiation therapy facility for small animals. *Progress in Biomedical Optics and Imaging*, v7258..
  - 27. Caracappa PF, Chao TC, Xu, XG (2008, Jul). Cellularity in skeletal dosimetry. *Transactions of the American Nuclear Society*, v 99, p 67..
  - 28. C.J. Tung, L.C.Wang, H.C.Wang, C.C. Lee, T.C. Chao (2008, Jun). In vivo dose verification for photon treatments of head and neck carcinomas. *Radiation Measurements*, 43, 870-874.
  - 29. Tu SJ, Hsieh HL, Chao TC (2008, Mar). CT number variations in micro CT imaging systems. *Progress in Biomedical Optics and Imaging*, v6913..
  - 30. Tung CJ, Chao TC, Hsieh HW, Chan WT (2007, Jun). Low-energy electron interactions with liquid water and energy depositions in nanometric volumes. *Nuclear Instruments and Methods in Physics Research B*, 262:231-239.
  - 31. Tung CJ\*, Chan WT, Chao TC, Tu YH, Kwei CM, (2007, May). Inelastic interactions of low-energy electrons with biological media. *Nuclear Instruments and Methods in Physics Research A*, 580:598-601..
  - 32. Wang JJ, Chao TC, Wai YY, Hsu YY (2006, Jun). Novel Diffusion Anisotropy Indices: An Evaluation.. *JMRI*, 24:211-217..
  - 33. Xu XG, Chao TC, and Bozkurt A (2005). Comparison of effective doses from various monoenergetic particles based on the stylised and the VIP\_Man tomographic models.. *Radiation Protection Dosimetry*, 115:530-535..
  - 34. Chao TC\* , Xu XG (2004, Nov). S-values calculated from a tomographic head/brain model for brain imaging.. *Phys. Med. Biol.*, 49(2004):4971-4984..
  - 35. Winslow M, Huda W, Xu XG, Chao TC, Shi CY, Ogden KM, Scalzetti EM (2004, Jan). Use of the VIP-Man Model to Calculate Energy Impacted and Effective Dose for X-ray Examinations. *Health Phy.*, 174-182..
  - 36. Xu XG and Chao TC (2003, Jun). Calculations of specific absorbed fractions for GI-Tract using a realistic whole-body tomographic model. *Cancer Biother. Radio.*, 18(3):431-436..
  - 37. Bozkurt A, Chao TC, and Xu XG (2001, May). Fluence-to-dose conversion

- coefficients based on the VIP-Man anatomical model and MCNPX code for monoenergetic neutrons above 20 MeV.. *Health Phys.*, 81:184-202... .
38. Chao TC, Bozkurt A, and Xu XG (2001, May). Organ dose conversion coefficients for 0.1 - 10 MeV external electrons calculated for the VIP-Man anatomical model.. *Health Phys.*, 81: 203-214... .
  39. Chao TC, Bozkurt A, and Xu XG (2001, May). Conversion coefficients based on the VIP-Man anatomical model and EGS4-VLSI code for external monoenergetic photons from 10 keV to 10 MeV.. *Health Phys.*, 81:163-201... .
  40. Chao TC, Xu XG (2001, Feb). Specific absorbed fractions from the image-based VIP-Man body model and EGS4-VLSI Monte Carlo code: Internal electron emitters.. *Phys. Med. Biol.*, 46: 901-927... .
  41. Bozkurt A, Chao TC, and Xu XG (2000, Nov). Fluence-to-dose conversion coefficients from monoenergetic neutrons below 20 MeV based on the VIP-Man anatomical model.. *Phys. Med. Biol.*, 45(2000):3059-3079... .
  42. Xu XG, Chao TC, and Bozkurt A (2000, May). VIP-MAN: An image-based whole-body adult male model constructed from color photographs of the Visible Human Project for multi-particle Monte Carlo calculations. *Health Phys.*, 78:476-485.. .
  43. Tung CJ, Cheng CY, Chao TC, and Tsai HY (1999, --). Determination of entrance skin doses and organ doses for medical X ray examinations.. *Radiat. Prot. Dosim.*, 85(1-4):417-420... .
  44. Tung CJ, Chao TC, Chen TR, Hsu FY, Lee IT, Chang SL, Liao CC, and Chen WL (1998, Jun). Dose reconstruction for residents living in Co-60-contaminated rebar buildings.. *Health Phys.*, 74(6):707-713... .

### 專書

1. Xu XG, Chao TC, Bozkurt A, Shi CY, Zhang JY. "Chapter 6: The 3D and 4D VIP-Man Computational Phantoms" in "Handbook of Anatomical Models for Radiation Dosimetry" TAYLOR & FRANCIS, 2009 (1) (ISBN: 978-1-4200-5979-3). New York: TAYLOR & FRANCIS. Dec, 2009.