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Education :

Ph.D., Dept of Nuclear Engineering (Medical Physics), University of Missouri – Columbia

Career Experience :

2021/02 ~ now Vice President of CTUST

2019/08 ~ 2021/01 Vice President and Secretary General of CTUST

2016/08 ~ now Professor of Dept of Medical Imaging and Radiological Sciences, CTUST

2016/08 ~ 2019/07 Secretary General of CTUST

2015/08 ~ 2016/07 Dean of Personnel Office

2010/09 ~ 2015/07 Deputy Dean of College of Health Sciences, CTUST

2010/02 ~ 2010/08 Secretary of College of Health Sciences, CTUST

2003/08 ~ 2006/07 Director of Graduate Institute of Radiological Sciences, CTUST

1995/08 ~ 2001/07 Chairman of Dept of Radiological Technology, CTUST

1994/08 ~ 2016/07 Associate Professor of Dept of Medical Imaging and Radiological Sciences, CTUST

1992/02 ~ 1992/07 Medical Physicist of Erie County Medical Center, NY, U.S.A.

Courses Taught :

Radiation Physics, Atomic Physics

Professional Fields :

Medical Physics, Radiation Related Applications

Research Interests :

Radiation Dosimetry, Radiation Detection

Publications :

1. 李正雄,鄭于吟,林玟佑,史天宇,鄭凱元*, 外傷全身電腦斷層掃描時間與影像品質之評估, 中華放射線技術學雜誌, 44(3):133-140, 2020
2. 李國齊†, 鄭凱元†, 陳威霖, 張正昂, 謝坤昌, 賴仲亮, 中老年人以 DXA 測量肌力與肌肉量相關性之探討, 醫學與健康期刊, 8(1), 2019
3. 張文釗, 趙逸玲, 賓崑龍, 吳銘哲, 史天宇, 鄭凱元*, 腹部透視攝影檢查曝露劑量之評估, 中華放射線技術學雜誌, 42(4), 195-202, 2018
4. 黃政凱; 黃友軒; 趙剛宏; 鄭凱元; 詹繕合; 洪忠毅; 賴雅惠, A Case of Hypertrophic Pulmonary Osteoarthropathy in a Patient with Lung Cancer on 99mTc-MDP Bone Scintigraphy, 中華放射線技術學雜誌 41(4), 220-223, 2017
5. Kai-Yuan Cheng†*, Ling-Ling Hsieh†, Cheng-Ting Shih, A comprehensive evaluation of NIPAM polymer gel dosimeters on three orthogonal planes and temporal stability analysis, PLoS One
6. Kai-Yuan Cheng, Sih-Ying Chen, Jiunn-I Shieh, Yi-Ying Wu, Ling-Ling Hsieh*, A novel polymer gel-loading phantom for magnetic resonance imaging, Arabian Journal for Science and Engineering, 41(1):163-167, 2016
7. 楊宗翰, 孫立民, 徐暉程, 呂宗憲, 鄭凱元*, 使用 CIRS 成人假體與金氧半場效電晶體評估乳癌病患使用照野中照野治療技術與混合強度控治療技術劑量的差異性, 放射治療與腫瘤學 23(2), 115-122, 2016

8. Cheng-Kai Huang, Jay Wu, Kai-Yuan Cheng, Lung-Kwang Pan, Optimization of imaging parameters for SPECT scans of [99mTc]TRODAT-1 using Taguchi analysis, PLoS One, 10(3): e0113817, 2015
9. Jiunn-I Shieh, Kai-Yuan Cheng, Huey-Lih Shyu, Yi-Chen Yu, Ling-Ling Hsieh*, Effects of composition interactions on the response of a turnbull blue radiochromic gel dosimeter, 104:40-44, 2014
10. Yen-Li Chen, Bor-Tsung Hsieh, Chih-Ming Chiang, Cheng-Ting Shih, Kai-Yuan Cheng*, Ling-Ling Hsieh*, Dose verification of a clinical intensity-modulated radiation therapy eye case by the magnetic resonance imaging of N-isopropylacrylamide gel dosimeters, Radiation Physics and Chemistry, 104: 188-191, 2014
11. Mu-Hsiung Chen, Jenny Zwei-Chieng Chang, Sang-Heng Kok, Yi-Jane Chen, Yao-Der Huang, Kai-Yuan Cheng*, Chun-Pin Lin, Intraobserver reliability of landmark identification in cone-beam computed tomography-synthesized two-dimensional cephalograms versus conventional cephalometric radiography: a preliminary study, Journal of Dental Sciences
12. Chih-Ming Chiang, Bor-Tsung Hsieh, Jiunn-I Shieh, Kai-Yuan Cheng, Ling-Ling Hsieh, An approach in exploring the fundamental dosimetric characteristics for a long shelf life irradiated acrylamide-based gel, Journal of Radioanalytical and Nuclear Chemistry, 298:1435-1445, 2013
13. Ming-Che Chang, Jin-Hua Chen, Ji-An Liang, Wen-Sheng Huang, Kai-Yuan Cheng, Chia-Hung Kao, PET or PET/CT for detection of peritoneal carcinomatosis a meta-analysis, Clinical Nuclear Medicine, 38 (8):623-629, 2013
14. 郭峯伶, 韓淑珍, 蔡建中, 林俊元, 陳怡, 王石補, 鄭凱元*, 利用量化的方法於冠狀動脈電腦斷層攝影對血管阻塞之評估, 中華放射線技術學雜誌, 37(2):113-120, 2013
15. Chung-Chieh Huang, Kai-Yuan Cheng, Kuang-Ching Chiu, Cheng-Kai Huang, Guang-Uei Hung, Jainn-Shiun Chiu, Hot gauntlet sign on F-18 FDG PET/CT, Annals of Nuclear Medicine and Molecular Imaging, 26(1):34-37, 2013
16. Cheng-Kai Huang, Shan Ho Chan, Guang-Uei Hung, Jainn-Shiun Chiu, Kuang-Ching Chiu, Kai-Yuan Cheng*, A technique of cardiac image fusion from gated myocardial perfusion SPECT and 64-slice CT, 中華放射線技術學雜誌, 37(1):56-61, 2013
17. Ming-Che Chang, Jin-Hua Chen, Ji-An Liang, Kuang-Tao Yang, Kai-Yuan Cheng, Chia-Hung Kao, Accuracy of whole-body FDG-PET and FDG-PET/CT in M staging of nasopharyngeal carcinoma: a systematic review and meta-analysis, European Journal of Radiology, 82(2):366-373, 2013
18. Cheng-Kai Huang, Kai-Yuan Cheng, Kuang-Ching Chiu, Jainn-Shiun Chiu, Looking without seeing: a easily overlooked posterior bladder layering sign on FDG PET/CT, Annals of Nuclear Medicine and Molecular Imaging, 25(4):221-222, 2012
19. Ming-Che Chang, Jin-Hua Chen, Ji-An Liang, Kuang-Tao Yang, Kai-Yuan Cheng, Chia-Hung Kao, 18F-FDG PET or PET/CT for detection of metastatic lymph nodes in patients with endometrial cancer: a systematic review and meta-analysis, European Journal of Radiology, 81(11):3511-3517, 2012
20. Min-Kuei Tsai, Hueisch-Jy Ding, Hsueh-Chou Lai, Kuo-Yang Yen, Chia-Ing Li, Yu-Yi Lin, Kai-Yuan Cheng*, Keh-Bin Wang, and Chia-Hung Kao*, Detection of gastroesophageal reflux esophagitis using 2-fluoro-2-deoxy-d-glucose positron emission tomography, The Scientific World Journal, 2012:702803, 2012
21. Ling-Ling Hsieh, Kai-Yuan Cheng, Bor-Tsung Hsieh, A novel thin NIPAM gel cassette dosimeter for photon-beam radiotherapy, PLoS ONE, 7(3):e31836, 2012
22. 趙真, 田雨生, 蘇冠豪, 張振莒, 鄭凱元*, 以像素值評估婦女乳房組織中乳腺及脂肪比例, 中華放射線技術學雜誌, 36(1):21-26, 2012

23. Ming-Che Chang, MD, Jin-Hua Chen, PhD, Ji-An Liang, MD, Cheng-Chieh Lin, MD, PhD, Kuang-Tao Yang, MD, Kai-Yuan Cheng, PhD, Jun-Jun Yeh, MD, Chia-Hung Kao, MD, Meta-analysis : comparison of F-18 fluorodeoxyglucose-positron emission tomography and bonescintigraphy in the detection of bone metastasis in patients with lung cancer, *Academic Radiology*, 19(3):349-357, 2012
24. Bor-Tsung Hsieh, Chen-Yu Chang, Ying-Chen Chang, Kai-Yuan Cheng*, Relationship between the level of essential metal elements in human hair and coronary heart disease, *Journal of Radioanalytical and Nuclear Chemistry*, 290:165-169, 2011
25. 黃耀德,陳慧曄,陳木熊,鄭凱元,使用改良式下斜位咬合攝影法偵測下頷唾液腺結石, *中華放射線技術學雜誌*, 35(3):175-180, 2011
26. Cheng-Kai Huang, Kai-Yuan Cheng*, A technical note of 131I--iodomethyl-19-norcholesterol SPECT/CT for adrenal cortical imaging: short communication, *中華放射線技術學雜誌*, 35(2):118-122, 2011
27. Kai-Yuan Cheng, Kuo-Shan Yao, Hsueh-Hsia Lo, Chen-Yu Chang, and Po-Hsiang Chen, Photoelectrocatalytic degradation of isopropyl alcohol by TiO₂/Ti thin-film electrode, *Advanced Materials Research*, 123-125:165-168, 2010
28. Kai-Yuan Cheng, Ling-Ling Hsieh, Kuo-Shan Yao, Ching-Hsing Lin, En-Jung Chang, and Chen-Yu Chang, Decomposition of wastewater containing isopropyl alcohol using the gamma-ray/hydrogen peroxide process, *Journal of Environmental Engineering and Management*, 20(3):151-156, 2010
29. 賴南谷,田雨生,廖英蘭,鄭凱元,蔡惠予,探討 CT-SD16 固態偵檢器應用於電腦斷層掃描 X 射束劑量品質的可行性, *中華放射線技術學雜誌*, 33(2):85-92, 2009
30. Hon-Ki Hsu, Cheng-Kai Huang, Yu-Lin Bai, Kai-Yuan Cheng, Guang-Uei Hung, False-positive bony FDG accumulations due to fractures in a patient with lung cancer: the value of integrated information of PET/CT, *Annals of Nuclear Medicine and Sciences*, 22(3):183-187, 2009