List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5484432/publications.pdf Version: 2024-02-01



SHUALLENC

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Dual- and Multi-Energy CT: Principles, Technical Approaches, and Clinical Applications. Radiology, 2015, 276, 637-653.   | 7.3 | 1,092     |
| 2  | Prior image constrained compressed sensing (PICCS): A method to accurately reconstruct dynamic CT images from highly undersampled projection data sets. Medical Physics, 2008, 35, 660-663.      | 3.0 | 939       |
| 3  | Dual-Energy CT–Based Monochromatic Imaging. American Journal of Roentgenology, 2012, 199, S9-S15.  | 2.2 | 483       |
| 4  | CT Dose Index and Patient Dose: They Are <i>Not</i> the Same Thing. Radiology, 2011, 259, 311-316.   | 7.3 | 377       |
| 5  | Radiation dose reduction in computed tomography: techniques and future perspective. Imaging in Medicine, 2009, 1, 65-84.   | 0.0 | 296       |
| 6  | Virtual monochromatic imaging in dualâ€source dualâ€energy CT: Radiation dose and image quality.<br>Medical Physics, 2011, 38, 6371-6379.  | 3.0 | 282       |
| 7  | Photon-counting Detector CT: System Design and Clinical Applications of an Emerging Technology.<br>Radiographics, 2019, 39, 729-743.   | 3.3 | 270       |
| 8  | Achieving Routine Submillisievert CT Scanning: Report from the Summit on Management of Radiation<br>Dose in CT. Radiology, 2012, 264, 567-580.   | 7.3 | 246       |
| 9  | Dual-energy CT for the diagnosis of gout: an accuracy and diagnostic yield study. Annals of the Rheumatic Diseases, 2015, 74, 1072-1077.   | 0.9 | 216       |
| 10 | Identification of Intraarticular and Periarticular Uric Acid Crystals with Dual-Energy CT: Initial Evaluation. Radiology, 2011, 261, 516-524.  | 7.3 | 211       |
| 11 | Human Imaging With Photon Counting–Based Computed Tomography at Clinical Dose Levels.<br>Investigative Radiology, 2016, 51, 421-429.   | 6.2 | 205       |
| 12 | First Clinical Photon-counting Detector CT System: Technical Evaluation. Radiology, 2022, 303, 130-138.  | 7.3 | 201       |
| 13 | Evaluation of conventional imaging performance in a research whole-body CT system with a photon-counting detector array. Physics in Medicine and Biology, 2016, 61, 1572-1595.                   | 3.0 | 185       |
| 14 | Prevalence of Extracoronary Vascular Abnormalities and Fibromuscular Dysplasia in Patients With<br>Spontaneous Coronary Artery Dissection. American Journal of Cardiology, 2015, 115, 1672-1677. | 1.6 | 167       |
| 15 | Dualâ€source spiral CT with pitch up to 3.2 and 75 ms temporal resolution: Image reconstruction and assessment of image quality. Medical Physics, 2009, 36, 5641-5653.                           | 3.0 | 155       |
| 16 | Performance evaluation of computed tomography systems: Summary of AAPM Task Group 233. Medical<br>Physics, 2019, 46, e735-e756.  | 3.0 | 148       |
| 17 | High temporal resolution and streak-free four-dimensional cone-beam computed tomography. Physics in Medicine and Biology, 2008, 53, 5653-5673.   | 3.0 | 140       |
| 18 | 150-μm Spatial Resolution Using Photon-Counting Detector Computed Tomography Technology.<br>Investigative Radiology, 2018, 53, 655-662.  | 6.2 | 137       |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Three-dimensional Physical Modeling: Applications and Experience at Mayo Clinic. Radiographics, 2015, 35, 1989-2006.   | 3.3 | 134       |
| 20 | Lowâ€dose <scp>CT</scp> for the detection and classification of metastatic liver lesions: Results of the 2016 Low Dose <scp>CT</scp> Grand Challenge. Medical Physics, 2017, 44, e339-e352.  | 3.0 | 132       |
| 21 | Dual-Energy Dual-Source CT With Additional Spectral Filtration Can Improve the Differentiation of<br>Non–Uric Acid Renal Stones: An Ex Vivo Phantom Study. American Journal of Roentgenology, 2011, 196,<br>1279-1287.                         | 2.2 | 120       |
| 22 | Prediction of human observer performance in a 2â€alternative forced choice lowâ€contrast detection<br>task using channelized Hotelling observer: Impact of radiation dose and reconstruction algorithms.<br>Medical Physics, 2013, 40, 041908. | 3.0 | 117       |
| 23 | Degradation of CT Low-Contrast Spatial Resolution Due to the Use of Iterative Reconstruction and Reduced Dose Levels. Radiology, 2015, 276, 499-506.   | 7.3 | 116       |
| 24 | High-Resolution Chest Computed Tomography Imaging of the Lungs. Investigative Radiology, 2019, 54,<br>129-137.   | 6.2 | 106       |
| 25 | Dose-efficient ultrahigh-resolution scan mode using a photon counting detector computed tomography system. Journal of Medical Imaging, 2016, 3, 043504.  | 1.5 | 105       |
| 26 | Maximizing Iodine Contrast-to-Noise Ratios in Abdominal CT Imaging through Use of Energy Domain<br>Noise Reduction and Virtual Monoenergetic Dual-Energy CT. Radiology, 2015, 276, 562-570.  | 7.3 | 100       |
| 27 | Noise reduction in spectral CT: Reducing dose and breaking the tradeâ€off between image noise and energy bin selection. Medical Physics, 2011, 38, 4946-4957.  | 3.0 | 95        |
| 28 | Spectral performance of a whole-body research photon counting detector CT: quantitative accuracy in derived image sets. Physics in Medicine and Biology, 2017, 62, 7216-7232.  | 3.0 | 90        |
| 29 | Lowâ€dose CT image and projection dataset. Medical Physics, 2021, 48, 902-911.   | 3.0 | 89        |
| 30 | Streaking artifacts reduction in fourâ€dimensional coneâ€beam computed tomography. Medical Physics,<br>2008, 35, 4649-4659.  | 3.0 | 88        |
| 31 | Dose Reduction for Sinus and Temporal Bone Imaging Using Photon-Counting Detector CT With an<br>Additional Tin Filter. Investigative Radiology, 2020, 55, 91-100.  | 6.2 | 86        |
| 32 | Electronic Noise in CT Detectors: Impact on Image Noise and Artifacts. American Journal of Roentgenology, 2013, 201, W626-W632.  | 2.2 | 83        |
| 33 | Correlation between model observer and human observer performance in CT imaging when lesion<br>location is uncertain. Medical Physics, 2013, 40, 081908.   | 3.0 | 83        |
| 34 | Anatomic modeling using 3D printing: quality assurance and optimization. 3D Printing in Medicine, 2017, 3, 6.  | 3.1 | 83        |
| 35 | Radiation Dose Levels for Interventional CT Procedures. American Journal of Roentgenology, 2011, 197,<br>W97-W103.   | 2.2 | 77        |
| 36 | Attenuationâ€based estimation of patient size for the purpose of size specific dose estimation in CT. Part<br>I. Development and validation of methods using the CT image. Medical Physics, 2012, 39, 6764-6771.                               | 3.0 | 76        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Reduction of Metal Artifacts and Improvement in Dose Efficiency Using Photon-Counting Detector Computed Tomography and Tin Filtration. Investigative Radiology, 2019, 54, 204-211.   | 6.2 | 76        |
| 38 | Spectral prior image constrained compressed sensing (spectral PICCS) for photon-counting computed tomography. Physics in Medicine and Biology, 2016, 61, 6707-6732.  | 3.0 | 75        |
| 39 | Noise performance of low-dose CT: comparison between an energy integrating detector and a photon<br>counting detector using a whole-body research photon counting CT scanner. Journal of Medical<br>Imaging, 2016, 3, 043503.  | 1.5 | 74        |
| 40 | Dynamic CT technique for assessment of wrist joint instabilities. Medical Physics, 2011, 38, S50-S56.  | 3.0 | 69        |
| 41 | Comparison of a Photon-Counting-Detector CT with an Energy-Integrating-Detector CT for Temporal<br>Bone Imaging: A Cadaveric Study. American Journal of Neuroradiology, 2018, 39, 1733-1738.   | 2.4 | 69        |
| 42 | Photon Counting CT: Clinical Applications and Future Developments. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 441-452.   | 3.7 | 68        |
| 43 | Attenuationâ€based estimation of patient size for the purpose of size specific dose estimation in CT. Part<br>II. Implementation on abdomen and thorax phantoms using cross sectional CT images and scanned<br>projection radiograph images. Medical Physics, 2012, 39, 6772-6778. | 3.0 | 67        |
| 44 | Size-specific Dose Estimates for Chest, Abdominal, and Pelvic CT: Effect of Intrapatient Variability in<br>Water-equivalent Diameter. Radiology, 2015, 276, 184-190.   | 7.3 | 66        |
| 45 | Small (< 4 cm) Renal Mass: Differentiation of Oncocytoma From Renal Cell Carcinoma on Biphasic<br>Contrast-Enhanced CT. American Journal of Roentgenology, 2015, 205, 999-1007.  | 2.2 | 66        |
| 46 | Update on Multienergy CT: Physics, Principles, and Applications. Radiographics, 2020, 40, 1284-1308.   | 3.3 | 66        |
| 47 | A novel application of CT angiography to detect extracoronary vascular abnormalities in patients<br>with spontaneous coronary artery dissection. Journal of Cardiovascular Computed Tomography, 2014,<br>8, 189-197.   | 1.3 | 64        |
| 48 | Small (< 4 cm) Renal Masses: Differentiation of Angiomyolipoma Without Visible Fat From Renal Cell<br>Carcinoma Using Unenhanced and Contrast-Enhanced CT. American Journal of Roentgenology, 2015,<br>205, 1194-1202.   | 2.2 | 59        |
| 49 | Automatic Selection of Tube Potential for Radiation Dose Reduction in Vascular and<br>Contrast-Enhanced Abdominopelvic CT. American Journal of Roentgenology, 2013, 201, W297-W306.  | 2.2 | 58        |
| 50 | Full field-of-view, high-resolution, photon-counting detector CT: technical assessment and initial patient experience. Physics in Medicine and Biology, 2021, 66, 205019.  | 3.0 | 54        |
| 51 | Applications of Dual-Energy CT in Urologic Imaging: An Update. Radiologic Clinics of North America, 2012, 50, 191-205.   | 1.8 | 53        |
| 52 | Technical Note: Measuring contrast―and noiseâ€dependent spatial resolution of an iterative<br>reconstruction method in CT using ensemble averaging. Medical Physics, 2015, 42, 2261-2267.  | 3.0 | 52        |
| 53 | Observer Performance in the Detection and Classification of Malignant Hepatic Nodules and Masses with CT Image-Space Denoising and Iterative Reconstruction. Radiology, 2015, 276, 465-478.  | 7.3 | 51        |
| 54 | Use of dual-energy CT and virtual non-calcium techniques to evaluate post-traumatic bone bruises in knees in the subacute setting. Skeletal Radiology, 2014, 43, 1289-1295.  | 2.0 | 50        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | A Technique for Quantifying Wrist Motion Using Four-Dimensional Computed Tomography: Approach and Validation. Journal of Biomechanical Engineering, 2015, 137, .  | 1.3 | 49        |
| 56 | How Low Can We Go in Radiation Dose for the Data-Completion Scan on a Research Whole-Body<br>Photon-Counting Computed Tomography System. Journal of Computer Assisted Tomography, 2016, 40,<br>663-670.                                     | 0.9 | 47        |
| 57 | Detection and Characterization of Renal Stones by Using Photon-Counting–based CT. Radiology, 2018, 289, 436-442.  | 7.3 | 43        |
| 58 | A New Frontier in Temporal Bone Imaging: Photon-Counting Detector CT Demonstrates Superior<br>Visualization of Critical Anatomic Structures at Reduced Radiation Dose. American Journal of<br>Neuroradiology, 2022, 43, 579-584.            | 2.4 | 43        |
| 59 | Correlation between human and model observer performance for discrimination task in CT. Physics in<br>Medicine and Biology, 2014, 59, 3389-3404.  | 3.0 | 41        |
| 60 | Feasibility of multiâ€contrast imaging on dualâ€source photon counting detector (PCD) CT: An initial phantom study. Medical Physics, 2019, 46, 4105-4115.   | 3.0 | 41        |
| 61 | CT Noise-Reduction Methods for Lower-Dose Scanning: Strengths and Weaknesses of Iterative Reconstruction Algorithms and New Techniques. Radiographics, 2021, 41, 1493-1508.   | 3.3 | 41        |
| 62 | Observer Performance with Varying Radiation Dose and Reconstruction Methods for Detection of Hepatic Metastases. Radiology, 2018, 289, 455-464.   | 7.3 | 40        |
| 63 | Material decomposition with prior knowledge aware iterative denoising (MD-PKAID). Physics in Medicine and Biology, 2018, 63, 195003.  | 3.0 | 39        |
| 64 | In Vivo Pilot Study Evaluating the Thumb Carpometacarpal Joint During Circumduction. Clinical Orthopaedics and Related Research, 2014, 472, 1106-1113.  | 1.5 | 38        |
| 65 | Estimation of Observer Performance for Reduced Radiation Dose Levels in CT. Academic Radiology, 2017, 24, 876-890.  | 2.5 | 38        |
| 66 | Feasibility of Discriminating Uric Acid From Non–Uric Acid Renal Stones Using Consecutive Spatially<br>Registered Low- and High-Energy Scans Obtained on a Conventional CT Scanner. American Journal of<br>Roentgenology, 2015, 204, 92-97. | 2.2 | 37        |
| 67 | An effective noise reduction method for multiâ€energy <scp>CT</scp> images that exploit spatioâ€spectral features. Medical Physics, 2017, 44, 1610-1623.  | 3.0 | 37        |
| 68 | Correlation between a 2D channelized Hotelling observer and human observers in a lowâ€contrast<br>detection task with multislice reading in <scp>CT</scp> . Medical Physics, 2017, 44, 3990-3999.   | 3.0 | 37        |
| 69 | Improved coronary calcification quantification using photon-counting-detector CT: an ex vivo study in cadaveric specimens. European Radiology, 2021, 31, 6621-6630.   | 4.5 | 37        |
| 70 | Characterization of Urinary Stone Composition by Use of Third-Generation Dual-Source Dual-Energy<br>CT With Increased Spectral Separation. American Journal of Roentgenology, 2015, 205, 1203-1207.   | 2.2 | 36        |
| 71 | Technical Note: Improved CT number stability across patient size using dual-energy CT virtual monoenergetic imaging. Medical Physics, 2016, 43, 513-517.  | 3.0 | 36        |
| 72 | Subjective and objective heterogeneity scores for differentiating small renal masses using contrast-enhanced CT. Abdominal Radiology, 2017, 42, 1485-1492.  | 2.1 | 34        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Estimating the Clinical Impact of Photon-Counting-Detector CT in Diagnosing Usual Interstitial<br>Pneumonia. Investigative Radiology, 2022, 57, 734-741.   | 6.2 | 34        |
| 74 | The Role of Dynamic (4D) CT in the Detection of Scapholunate Ligament Injury. Journal of Wrist<br>Surgery, 2016, 05, 306-310.  | 0.7 | 33        |
| 75 | Ultra-high-resolution imaging of the shoulder and pelvis using photon-counting-detector CT: a feasibility study in patients. European Radiology, 2022, 32, 7079-7086.  | 4.5 | 31        |
| 76 | Low kV versus dual-energy virtual monoenergetic CT imaging for proven liver lesions: what are the<br>advantages and trade-offs in conspicuity and image quality? A pilot study. Abdominal Radiology, 2018,<br>43, 1404-1412. | 2.1 | 30        |
| 77 | Exact fan-beam image reconstruction algorithm for truncated projection data acquired from an asymmetric half-size detector. Physics in Medicine and Biology, 2005, 50, 1805-1820.  | 3.0 | 28        |
| 78 | Construction of realistic phantoms from patient images and a commercial three-dimensional printer.<br>Journal of Medical Imaging, 2016, 3, 033501.   | 1.5 | 28        |
| 79 | Radiation Dose Reduction at CT Enterography: How Low Can We Go While Preserving Diagnostic<br>Accuracy?. American Journal of Roentgenology, 2010, 195, 76-77.  | 2.2 | 27        |
| 80 | Estimating patient dose from CT exams that use automatic exposure control: Development and validation of methods to accurately estimate tube current values. Medical Physics, 2017, 44, 4262-4275.                           | 3.0 | 27        |
| 81 | Evaluation of projection―and dualâ€energyâ€based methods for metal artifact reduction in <scp>CT</scp><br>using a phantom study. Journal of Applied Clinical Medical Physics, 2018, 19, 252-260.                             | 1.9 | 27        |
| 82 | A deep learning―and partial least square regressionâ€based model observer for a lowâ€contrast lesion<br>detection task in CT. Medical Physics, 2019, 46, 2052-2063.  | 3.0 | 27        |
| 83 | Synthesizing images from multiple kernels using a deep convolutional neural network. Medical<br>Physics, 2020, 47, 422-430.  | 3.0 | 26        |
| 84 | Deepâ€learningâ€based direct inversion for material decomposition. Medical Physics, 2020, 47, 6294-6309.   | 3.0 | 26        |
| 85 | Improved visualization of the wrist at lower radiation dose with photon-counting-detector CT.<br>Skeletal Radiology, 2023, 52, 23-29.  | 2.0 | 26        |
| 86 | Technical Note: Development and validation of an open data format for CT projection data. Medical<br>Physics, 2015, 42, 6964-6972.   | 3.0 | 25        |
| 87 | Image-based material decomposition with a general volume constraint for photon-counting CT.<br>Proceedings of SPIE, 2015, 9412, .  | 0.8 | 24        |
| 88 | Dual-Energy CT for Quantification of Urinary Stone Composition in Mixed Stones: A Phantom Study.<br>American Journal of Roentgenology, 2016, 207, 321-329.   | 2.2 | 24        |
| 89 | A Universal Protocol for Abdominal CT Examinations Performed on a Photon-Counting Detector CT System. Investigative Radiology, 2020, 55, 226-232.  | 6.2 | 24        |
| 90 | CT negative attenuation pixel distribution and texture analysis for detection of fat in small angiomyolipoma on unenhanced CT. Abdominal Radiology, 2016, 41, 1142-1151.   | 2.1 | 22        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | Quantitative Knee Arthrography in a Large Animal Model of Osteoarthritis Using Photon-Counting Detector CT. Investigative Radiology, 2020, 55, 349-356.   | 6.2 | 22        |
| 92  | Dealing with Uncertainty in CT Images. Radiology, 2016, 279, 5-10.  | 7.3 | 21        |
| 93  | Individualized kV Selection and Tube Current Reduction in Excretory Phase Computed Tomography<br>Urography. Journal of Computer Assisted Tomography, 2013, 37, 551-559.                                     | 0.9 | 20        |
| 94  | Lung nodule volume quantification and shape differentiation with an ultra-high resolution<br>technique on a photon-counting detector computed tomography system. Journal of Medical Imaging,<br>2017, 4, 1. | 1.5 | 20        |
| 95  | Improving iodine contrast to noise ratio using virtual monoenergetic imaging and<br>prior-knowledge-aware iterative denoising (mono-PKAID). Physics in Medicine and Biology, 2019, 64,<br>105014.           | 3.0 | 19        |
| 96  | Reducing Image Noise in Computed Tomography (CT) Colonography. Journal of Computer Assisted<br>Tomography, 2014, 38, 398-403.   | 0.9 | 18        |
| 97  | Lesion insertion in the projection domain: Methods and initial results. Medical Physics, 2015, 42, 7034-7042.   | 3.0 | 18        |
| 98  | Dual-source photon counting detector CT with a tin filter: a phantom study on iodine quantification performance. Physics in Medicine and Biology, 2019, 64, 115019.   | 3.0 | 18        |
| 99  | Implementation of a channelized Hotelling observer model to assess image quality of x-ray angiography systems. Journal of Medical Imaging, 2015, 2, 015503.   | 1.5 | 17        |
| 100 | Utility of single-energy and dual-energy computed tomography in clot characterization: An in-vitro study. Interventional Neuroradiology, 2017, 23, 279-284.   | 1.1 | 17        |
| 101 | Characterization of Urinary Stone Composition by Use of Whole-body, Photon-counting Detector CT.<br>Academic Radiology, 2018, 25, 1270-1276.  | 2.5 | 17        |
| 102 | Evaluating a Convolutional Neural Network Noise Reduction Method When Applied to CT Images<br>Reconstructed Differently Than Training Data. Journal of Computer Assisted Tomography, 2021, 45,<br>544-551.  | 0.9 | 17        |
| 103 | Radiation Dose Reduction for CT-Guided Renal Tumor Cryoablation. American Journal of Roentgenology, 2011, 196, W586-W591.   | 2.2 | 16        |
| 104 | Impact of number of repeated scans on model observer performance for a low-contrast detection task in computed tomography. Journal of Medical Imaging, 2016, 3, 023504.                                     | 1.5 | 15        |
| 105 | Ability of Dual-Energy CT to Detect Silicone Gel Breast Implant Rupture and Nodal Silicone Spread.<br>American Journal of Roentgenology, 2019, 212, 933-942.  | 2.2 | 15        |
| 106 | Observer Performance for Detection of Pulmonary Nodules at Chest CT over a Large Range of Radiation Dose Levels. Radiology, 2020, 297, 699-707.   | 7.3 | 15        |
| 107 | Radiation Dose Reduction in Dual-Energy CT: Does It Affect the Accuracy of Urinary Stone Characterization?. American Journal of Roentgenology, 2015, 205, W172-W176.  | 2.2 | 14        |
| 108 | Selection of optimal tube potential settings for dual-energy CT virtual mono-energetic imaging of iodine in the abdomen. Abdominal Radiology, 2017, 42, 2289-2296.  | 2.1 | 14        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | Estimation of signal and noise for a whole-body research photon-counting CT system. Journal of<br>Medical Imaging, 2017, 4, 023505.  | 1.5 | 14        |
| 110 | Multiâ€energy computed tomography and material quantification: Current barriers and opportunities for advancement. Medical Physics, 2020, 47, 3752-3771.   | 3.0 | 14        |
| 111 | Multi-energy CT imaging for large patients using dual-source photon-counting detector CT. Physics in<br>Medicine and Biology, 2020, 65, 17NT01.  | 3.0 | 14        |
| 112 | Dual-source multienergy CT with triple or quadruple x-ray beams. Journal of Medical Imaging, 2018, 5, 1.   | 1.5 | 14        |
| 113 | The influence of focal spot blooming on highâ€contrast spatial resolution in CT imaging. Medical Physics, 2015, 42, 6011-6020.   | 3.0 | 13        |
| 114 | Use of CT Dose Notification and Alert Values in Routine Clinical Practice. Journal of the American<br>College of Radiology, 2014, 11, 450-455.   | 1.8 | 12        |
| 115 | Assessment of Low-Contrast Resolution for the American College of Radiology Computed<br>Tomographic Accreditation Program. Journal of Computer Assisted Tomography, 2015, 39, 619-623.             | 0.9 | 12        |
| 116 | Arterial wall perfusion measured with photon counting spectral x-ray CT. Proceedings of SPIE, 2016, 9967, .  | 0.8 | 12        |
| 117 | Characterization of thrombus composition with multimodality CT-based imaging: an in-vitro study.<br>Journal of NeuroInterventional Surgery, 2021, 13, 738-740.                                     | 3.3 | 12        |
| 118 | A robust noise reduction technique for time resolved CT. Medical Physics, 2015, 43, 347-359.   | 3.0 | 11        |
| 119 | Implementation and evaluation of a protocol management system for automated review of CT protocols. Journal of Applied Clinical Medical Physics, 2016, 17, 523-533.                                | 1.9 | 11        |
| 120 | Clinical evaluation of a phantom-based deep convolutional neural network for whole-body-low-dose and ultra-low-dose CT skeletal surveys. Skeletal Radiology, 2022, 51, 145-151.                    | 2.0 | 11        |
| 121 | Dual-source multi-energy CT with triple or quadruple x-ray beams. , 2016, 9783, .  |     | 10        |
| 122 | Technical Note: kVâ€independent coronary calcium scoring: A phantom evaluation of score accuracy and potential radiation dose reduction. Medical Physics, 2021, 48, 1307-1314.                     | 3.0 | 10        |
| 123 | Random search as a neural network optimization strategy for Convolutional-Neural-Network<br>(CNN)-based noise reduction in CT. , 2021, 11596, .  |     | 10        |
| 124 | Impact of photon counting detector technology on kV selection and diagnostic workflow in CT. , 2018, 10573, .  |     | 10        |
| 125 | Dual-Energy CT Monitoring of Cryoablation Zone Growth in the Spinal Column and Bony Pelvis: A Laboratory Study. Journal of Vascular and Interventional Radiology, 2019, 30, 1496-1503.             | 0.5 | 9         |
| 126 | Localization of liver lesions in abdominal CT imaging: I. Correlation of human observer performance between anatomical and uniform backgrounds. Physics in Medicine and Biology, 2019, 64, 105011. | 3.0 | 9         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Evaluation of Lower-Dose Spiral Head CT for Detection of Intracranial Findings Causing Neurologic<br>Deficits. American Journal of Neuroradiology, 2019, 40, 1855-1863.   | 2.4 | 9         |
| 128 | Use of a channelized Hotelling observer to assess CT image quality and optimize dose reduction for iteratively reconstructed images. Journal of Medical Imaging, 2017, 4, 1.  | 1.5 | 9         |
| 129 | Deep-learning-based model observer for a lung nodule detection task in computed tomography.<br>Journal of Medical Imaging, 2020, 7, 1.  | 1.5 | 9         |
| 130 | Improved assessment of coronary artery luminal stenosis with heavy calcifications using high-resolution photon-counting detector CT. , 2022, , .  |     | 9         |
| 131 | Construction of realistic liver phantoms from patient images using 3D printer and its application in CT image quality assessment. , 2015, 2015, .   |     | 8         |
| 132 | Localization of liver lesions in abdominal CT imaging: II. Mathematical model observer performance correlates with human observer performance for localization of liver lesions in abdominal CT imaging. Physics in Medicine and Biology, 2019, 64, 105012. | 3.0 | 8         |
| 133 | Electrocardiogram-Gated Computed Tomography with Coronary Angiography for Cardiac<br>Substructure Delineation and Sparing in Patients with Mediastinal Lymphomas Treated with Radiation<br>Therapy. Practical Radiation Oncology, 2020, 10, 104-111.        | 2.1 | 8         |
| 134 | Deep-learning-based direct synthesis of low-energy virtual monoenergetic images with multi-energy<br>CT. Journal of Medical Imaging, 2021, 8, 052104.   | 1.5 | 8         |
| 135 | Reducing Heart Dose with Protons and Cardiac Substructure Sparing for Mediastinal Lymphoma<br>Treatment. International Journal of Particle Therapy, 2020, 7, 1-12.  | 1.8 | 8         |
| 136 | Lesion insertion in projection domain for computed tomography image quality assessment.<br>Proceedings of SPIE, 2015, 9412, .   | 0.8 | 7         |
| 137 | An open library of CT patient projection data. Proceedings of SPIE, 2016, 9783, .   | 0.8 | 7         |
| 138 | Percutaneous Renal Tumor Ablation: Radiation Exposure During Cryoablation and Radiofrequency<br>Ablation. CardioVascular and Interventional Radiology, 2016, 39, 233-238.   | 2.0 | 7         |
| 139 | Dynamic computed tomographic assessment of the mitral annulus in patients with and without mitral prolapse. Journal of Cardiovascular Computed Tomography, 2020, 14, 502-509.   | 1.3 | 7         |
| 140 | Ultra-high resolution photon-counting detector CT reconstruction using spectral prior image constrained compressed-sensing (UHR-SPICCS). , 2018, 10573, .   |     | 7         |
| 141 | Measuring arterial wall perfusion using photon-counting computed tomography (CT): improving CT number accuracy of artery wall using image deconvolution. Journal of Medical Imaging, 2017, 4, 1.  | 1.5 | 7         |
| 142 | Deepâ€learning model observer for a lowâ€contrast hepatic metastases localization task in computed tomography. Medical Physics, 2022, 49, 70-83.  | 3.0 | 7         |
| 143 | A virtual clinical trial using projection-based nodule insertion to determine radiologist reader performance in lung cancer screening CT. , 2017, 10132, .  |     | 6         |
| 144 | Clinical utility of virtual noncalcium dual-energy CT in imaging of the pelvis and hip. Skeletal Radiology, 2019, 48, 1833-1842.  | 2.0 | 6         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Noise reduction in CT image using prior knowledge aware iterative denoising. Physics in Medicine and Biology, 2020, , .   | 3.0 | 6         |
| 146 | Determination of optimal image type and lowest detectable concentration for iodine detection on a photon counting detector-based multi-energy CT system. , 2018, 10573, .   |     | 6         |
| 147 | Simulation of CT images reconstructed with different kernels using a convolutional neural network and its implications for efficient CT workflow. , 2019, , .   |     | 6         |
| 148 | Validation of a Projection-domain Insertion of Liver Lesions into CT Images. Academic Radiology, 2016, 23, 1221-1229.   | 2.5 | 5         |
| 149 | Evaluation of a projection-domain lung nodule insertion technique in thoracic CT. , 2016, 9783, .   |     | 5         |
| 150 | Consistency of Renal Stone Volume Measurements Across CT Scanner Model and Reconstruction Algorithm Configurations. American Journal of Roentgenology, 2017, 209, 116-121.  | 2.2 | 5         |
| 151 | Practical implementation of channelized hotelling observers: effect of ROI size. Proceedings of SPIE, 2017, 10132, .  | 0.8 | 5         |
| 152 | Impact of Effective Detector Pixel and CT Voxel Size on Accurate Estimation of Blood Volume in Opacified Microvasculature. Academic Radiology, 2019, 26, 1410-1416.   | 2.5 | 5         |
| 153 | X-Ray Transmittance Modeling-Based Material Decomposition Using a Photon-Counting Detector CT<br>System. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 508-516.                                      | 3.7 | 5         |
| 154 | High resolution, full field of view, whole body photon-counting detector CT: system assessment and initial experience. , 2021, 11595, .   |     | 5         |
| 155 | Overcoming calcium blooming and improving the quantification accuracy of percent area luminal stenosis by material decomposition of multi-energy computed tomography datasets. Journal of Medical Imaging, 2020, 7, 053501. | 1.5 | 5         |
| 156 | Quantification of coronary calcification using high-resolution photon-counting-detector CT and an image domain denoising algorithm. , 2022, , .   |     | 5         |
| 157 | A minimum SNR criterion for computed tomography object detection in the projection domain.<br>Medical Physics, 2022, 49, 4988-4998.   | 3.0 | 5         |
| 158 | Use of Ionizing Radiation in Screening Examinations for Coronary Artery Calcium and Cancers of the<br>Lung, Colon, and Breast. Seminars in Roentgenology, 2015, 50, 148-160.  | 0.6 | 4         |
| 159 | Estimation of signal and noise for a whole-body photon counting research CT system. Proceedings of SPIE, 2016, 9783, .  | 0.8 | 4         |
| 160 | Predicting detection performance with model observers: Fourier domain or spatial domain?.<br>Proceedings of SPIE, 2016, 9783, .   | 0.8 | 4         |
| 161 | Relative accuracy of spin-image-based registration of partial capitate bones in 4DCT of the wrist.<br>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2016, 4,<br>360-367.          | 1.9 | 4         |
| 162 | Evaluation of a projection-domain lung nodule insertion technique in thoracic computed tomography. Journal of Medical Imaging, 2017, 4, 013510.   | 1.5 | 4         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Reducing radiation dose for multi-phase contrast-enhanced dual energy renal CT: pilot study evaluating prior iterative reconstruction. Abdominal Radiology, 2019, 44, 3350-3358.  | 2.1 | 4         |
| 164 | An interactive eyeâ€ŧracking system for measuring radiologists' visual fixations in volumetric CT<br>images: Implementation and initial eyeâ€ŧracking accuracy validation. Medical Physics, 2021, 48, 6710-6723.  | 3.0 | 4         |
| 165 | A Pilot Study to Estimate the Impact of High Matrix Image Reconstruction on Chest Computed Tomography. Journal of Clinical Imaging Science, 2021, 11, 52.   | 1.1 | 4         |
| 166 | Evaluation of a photon counting Medipix3RX cadmium zinc telluride spectral x-ray detector. Journal of Medical Imaging, 2018, 5, 1.  | 1.5 | 4         |
| 167 | Dependence of Water-equivalent Diameter and Size-specific Dose Estimates on CT Tube Potential.<br>Radiology, 2022, 303, 404-411.  | 7.3 | 4         |
| 168 | Impact of improved spatial resolution on radiomic features using photon-counting-detector CT. , 2022, , .   |     | 4         |
| 169 | Radiation Dose in CT–guided Interventional Procedures: Establishing a Benchmark. Radiology, 2018, 289, 158-159.   | 7.3 | 3         |
| 170 | Determination of iodine detectability in different types of multiple-energy images for a photon-counting detector computed tomography system. Journal of Medical Imaging, 2019, 6, 1.   | 1.5 | 3         |
| 171 | Correlation between a deep-learning-based model observer and human observer for a realistic lung nodule localization task in chest CT. , 2019, , .  |     | 3         |
| 172 | Multi-contrast imaging on dual-source photon-counting-detector (PCD) CT. , 2019, , .  |     | 3         |
| 173 | A Blooming correction technique for improved vasa vasorum detection using an ultra-high-resolution photon-counting detector CT. , 2020, 11312, .  |     | 3         |
| 174 | Utility of an automatic adaptive iterative metal artifact reduction AiMAR algorithm in improving CT<br>imaging of patients with hip prostheses evaluated for suspected bladder malignancy. Abdominal<br>Radiology, 2022, 47, 2158-2167.   | 2.1 | 3         |
| 175 | 3D-3D registration of partial capitate bones using spin-images. Proceedings of SPIE, 2013, 8671, .  | 0.8 | 2         |
| 176 | Technical Note: Display window setting: An important factor for detecting subtle but clinically relevant artifacts in daily CT quality control. Medical Physics, 2016, 43, 6413-6417.   | 3.0 | 2         |
| 177 | A multi-reader inÂvitro study using porcine kidneys to determine the impact of integrated circuit detectors and iterative reconstruction on the detection accuracy, size measurement, and radiation dose for small (<4 mm) renal stones. Acta Radiologica, 2017, 58, 1012-1019. | 1.1 | 2         |
| 178 | Feasibility of using megavoltage computed tomography to reduce proton range uncertainty: A simulation study. Journal of Applied Clinical Medical Physics, 2021, 22, 131-140.  | 1.9 | 2         |
| 179 | Correlation between model observers in uniform background and human observer in patient liver background for a low-contrast detection task in CT. , 2018, 10577, .  |     | 2         |
| 180 | Improving coronary artery imaging in single source CT with cardiac motion correction using attention and spatial transformer based neural networks. , 2022, , .   |     | 2         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Impact of number of repeated scans on model observer performance for a low-contrast detection task in CT. Proceedings of SPIE, 2015, 9416, .  | 0.8 | 1         |
| 182 | Detection of increased vasa vasorum in artery walls: improving CT number accuracy using image deconvolution. , 2017, 10132, .   |     | 1         |
| 183 | State-of-the-Art Dual-Energy Computed Tomography in Gastrointestinal and Genitourinary Imaging.<br>Advances in Clinical Radiology, 2019, 1, 1-17.   | 0.2 | 1         |
| 184 | Initial testing of pegfilgrastim (Neulasta Onpro) onâ€body injector in multiple radiological imaging<br>environments. Journal of Applied Clinical Medical Physics, 2021, 22, 343-349.   | 1.9 | 1         |
| 185 | Taskâ€specific efficient channel selection and bias management for Gabor function channelized<br>Hotelling observer model for the assessment of xâ€ray angiography system performance. Medical<br>Physics, 2021, 48, 3638-3653. | 3.0 | 1         |
| 186 | Implementation and experimental evaluation of Mega-voltage fan-beam CT using a linear accelerator.<br>Radiation Oncology, 2021, 16, 139.  | 2.7 | 1         |
| 187 | Phase-contrast imaging with a compact x-ray light source: system design. Journal of Medical Imaging, 2017, 4, 1.  | 1.5 | 1         |
| 188 | Imaging evaluation and treatment of nephrolithiasis: an update. Minnesota Medicine, 2010, 93, 48-51.  | 0.1 | 1         |
| 189 | Technical note: Evaluation of Artificial 120â€kilovolt computed tomography images for radiation therapy applications. Medical Physics, 2022, , .  | 3.0 | 1         |
| 190 | A 25-reader performance study for hepatic metastasis detection: lessons from unsupervised learning. , 2022, , .   |     | 1         |
| 191 | Quantitative assessment of motion effects in dual-source dual energy CT and dual-source photon-counting detector CT. , 2022, , .  |     | 1         |
| 192 | Concern about a recently published paper in the European Journal of Radiology. European Journal of<br>Radiology, 2018, 109, 203.  | 2.6 | 0         |
| 193 | The feasibility of low iodine dynamic CT angiography with test bolus for evaluation of lower extremity peripheral artery disease. Vascular, 2021, 29, 170853812098630.  | 0.9 | 0         |
| 194 | Empirical beam hardening and ring artifact correction for xâ€ray grating interferometry (EBHCâ€GI).<br>Medical Physics, 2021, 48, 1327-1340.  | 3.0 | 0         |
| 195 | Deep-learning lesion and noise insertion for virtual clinical trial in chest CT. , 2021, 11595, .   |     | 0         |
| 196 | Reader Performance as a Function of Patient Size for the Detection of Hepatic Metastases. Journal of Computer Assisted Tomography, 2021, Publish Ahead of Print, 812-819.   | 0.9 | 0         |
| 197 | Optimizing Web-Based Viewer of 4D CT Scans for Clinical Assessment of Injured Wrists. , 2021, 2021, 2405-2408.  |     | 0         |