

Cynthia H Mccollough

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4955365/cynthia-h-mccollough-publications-by-citations.pdf>

Version: 2024-04-17

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

254
papers

12,316
citations

53
h-index

107
g-index

275
ext. papers

14,721
ext. citations

5.1
avg, IF

6.51
L-index

#	Paper	IF	Citations
254	First performance evaluation of a dual-source CT (DSCT) system. <i>European Radiology</i> , 2006 , 16, 256-68	8	1118
253	Dual- and Multi-Energy CT: Principles, Technical Approaches, and Clinical Applications. <i>Radiology</i> , 2015 , 276, 637-53	20.5	739
252	CT dose reduction and dose management tools: overview of available options. <i>Radiographics</i> , 2006 , 26, 503-12	5.4	622
251	Strategies for reducing radiation dose in CT. <i>Radiologic Clinics of North America</i> , 2009 , 47, 27-40	2.3	557
250	Dual-energy CT-based monochromatic imaging. <i>American Journal of Roentgenology</i> , 2012 , 199, S9-S15	5.4	397
249	Radiation exposure and pregnancy: when should we be concerned?. <i>Radiographics</i> , 2007 , 27, 909-17; discussion 917-8	5.4	365
248	Noninvasive differentiation of uric acid versus non-uric acid kidney stones using dual-energy CT. <i>Academic Radiology</i> , 2007 , 14, 1441-7	4.3	308
247	Performance evaluation of a multi-slice CT system. <i>Medical Physics</i> , 1999 , 26, 2223-30	4.4	289
246	Radiation dose reduction in computed tomography: techniques and future perspective. <i>Imaging in Medicine</i> , 2009 , 1, 65-84	1	235
245	Virtual monochromatic imaging in dual-source dual-energy CT: radiation dose and image quality. <i>Medical Physics</i> , 2011 , 38, 6371-9	4.4	233
244	Achieving routine submillisievert CT scanning: report from the summit on management of radiation dose in CT. <i>Radiology</i> , 2012 , 264, 567-80	20.5	205
243	Quantitative imaging of element composition and mass fraction using dual-energy CT: three-material decomposition. <i>Medical Physics</i> , 2009 , 36, 1602-9	4.4	204
242	Calculation of effective dose. <i>Medical Physics</i> , 2000 , 27, 828-37	4.4	200
241	Coronary artery calcium: a multi-institutional, multimanufacturer international standard for quantification at cardiac CT. <i>Radiology</i> , 2007 , 243, 527-38	20.5	198
240	Identification of intraarticular and periarticular uric acid crystals with dual-energy CT: initial evaluation. <i>Radiology</i> , 2011 , 261, 516-24	20.5	181
239	Automatic selection of tube potential for radiation dose reduction in CT: a general strategy. <i>Medical Physics</i> , 2010 , 37, 234-43	4.4	178
238	Dose performance of a 64-channel dual-source CT scanner. <i>Radiology</i> , 2007 , 243, 775-84	20.5	178

237	Dual-energy CT for the diagnosis of gout: an accuracy and diagnostic yield study. <i>Annals of the Rheumatic Diseases</i> , 2015 , 74, 1072-7	2.4	168
236	Optimal tube potential for radiation dose reduction in pediatric CT: principles, clinical implementations, and pitfalls. <i>Radiographics</i> , 2011 , 31, 835-48	5.4	148
235	Evaluation of conventional imaging performance in a research whole-body CT system with a photon-counting detector array. <i>Physics in Medicine and Biology</i> , 2016 , 61, 1572-95	3.8	144
234	Relationship between noise, dose, and pitch in cardiac multi-detector row CT. <i>Radiographics</i> , 2006 , 26, 1785-94	5.4	141
233	Dual-source dual-energy CT with additional tin filtration: Dose and image quality evaluation in phantoms and in vivo. <i>American Journal of Roentgenology</i> , 2010 , 195, 1164-74	5.4	138
232	Human Imaging With Photon Counting-Based Computed Tomography at Clinical Dose Levels: Contrast-to-Noise Ratio and Cadaver Studies. <i>Investigative Radiology</i> , 2016 , 51, 421-9	10.1	133
231	Adaptive nonlocal means filtering based on local noise level for CT denoising. <i>Medical Physics</i> , 2014 , 41, 011908	4.4	132
230	Dual-source spiral CT with pitch up to 3.2 and 75 ms temporal resolution: image reconstruction and assessment of image quality. <i>Medical Physics</i> , 2009 , 36, 5641-53	4.4	132
229	Prospective blinded comparison of wireless capsule endoscopy and multiphase CT enterography in obscure gastrointestinal bleeding. <i>Radiology</i> , 2011 , 260, 744-51	20.5	128
228	In defense of body CT. <i>American Journal of Roentgenology</i> , 2009 , 193, 28-39	5.4	126
227	Image quality optimization and evaluation of linearly mixed images in dual-source, dual-energy CT. <i>Medical Physics</i> , 2009 , 36, 1019-24	4.4	126
226	Appropriate patient selection at abdominal dual-energy CT using 80 kV: relationship between patient size, image noise, and image quality. <i>Radiology</i> , 2010 , 257, 732-42	20.5	126
225	How effective is effective dose as a predictor of radiation risk?. <i>American Journal of Roentgenology</i> , 2010 , 194, 890-6	5.4	110
224	The phantom portion of the American College of Radiology (ACR) computed tomography (CT) accreditation program: practical tips, artifact examples, and pitfalls to avoid. <i>Medical Physics</i> , 2004 , 31, 2423-42	4.4	103
223	Assessment of renal hemodynamics and function in pigs with 64-section multidetector CT: comparison with electron-beam CT. <i>Radiology</i> , 2007 , 243, 405-12	20.5	102
222	Dual-energy dual-source CT with additional spectral filtration can improve the differentiation of non-uric acid renal stones: an ex vivo phantom study. <i>American Journal of Roentgenology</i> , 2011 , 196, 1279-87	5.4	100
221	Prediction of human observer performance in a 2-alternative forced choice low-contrast detection task using channelized Hotelling observer: impact of radiation dose and reconstruction algorithms. <i>Medical Physics</i> , 2013 , 40, 041908	4.4	98
220	Answers to Common Questions About the Use and Safety of CT Scans. <i>Mayo Clinic Proceedings</i> , 2015 , 90, 1380-92	6.4	96

219	Methods for clinical evaluation of noise reduction techniques in abdominopelvic CT. <i>Radiographics</i> , 2014 , 34, 849-62	5.4	90
218	Degradation of CT Low-Contrast Spatial Resolution Due to the Use of Iterative Reconstruction and Reduced Dose Levels. <i>Radiology</i> , 2015 , 276, 499-506	20.5	86
217	Photon-counting Detector CT: System Design and Clinical Applications of an Emerging Technology. <i>Radiographics</i> , 2019 , 39, 729-743	5.4	83
216	Maximizing Iodine Contrast-to-Noise Ratios in Abdominal CT Imaging through Use of Energy Domain Noise Reduction and Virtual Monoenergetic Dual-Energy CT. <i>Radiology</i> , 2015 , 276, 562-70	20.5	79
215	Noise reduction in spectral CT: reducing dose and breaking the trade-off between image noise and energy bin selection. <i>Medical Physics</i> , 2011 , 38, 4946-57	4.4	78
214	Patient dose in cardiac computed tomography. <i>Herz</i> , 2003 , 28, 1-6	2.6	78
213	Development and validation of a practical lower-dose-simulation tool for optimizing computed tomography scan protocols. <i>Journal of Computer Assisted Tomography</i> , 2012 , 36, 477-87	2.2	75
212	Correlation between model observer and human observer performance in CT imaging when lesion location is uncertain. <i>Medical Physics</i> , 2013 , 40, 081908	4.4	66
211	150- μ m Spatial Resolution Using Photon-Counting Detector Computed Tomography Technology: Technical Performance and First Patient Images. <i>Investigative Radiology</i> , 2018 , 53, 655-662	10.1	63
210	Electronic noise in CT detectors: Impact on image noise and artifacts. <i>American Journal of Roentgenology</i> , 2013 , 201, W626-32	5.4	63
209	Low-dose CT for the detection and classification of metastatic liver lesions: Results of the 2016 Low Dose CT Grand Challenge. <i>Medical Physics</i> , 2017 , 44, e339-e352	4.4	62
208	Anatomic modeling using 3D printing: quality assurance and optimization. <i>3D Printing in Medicine</i> , 2017 , 3, 6	5	61
207	The Changing Incidence and Presentation of Urinary Stones Over 3 Decades. <i>Mayo Clinic Proceedings</i> , 2018 , 93, 291-299	6.4	61
206	Dose-efficient ultrahigh-resolution scan mode using a photon counting detector computed tomography system. <i>Journal of Medical Imaging</i> , 2016 , 3, 043504	2.6	61
205	State of the Art in Abdominal CT: The Limits of Iterative Reconstruction Algorithms. <i>Radiology</i> , 2019 , 293, 491-503	20.5	60
204	Spectral performance of a whole-body research photon counting detector CT: quantitative accuracy in derived image sets. <i>Physics in Medicine and Biology</i> , 2017 , 62, 7216-7232	3.8	58
203	Attenuation-based estimation of patient size for the purpose of size specific dose estimation in CT. Part I. Development and validation of methods using the CT image. <i>Medical Physics</i> , 2012 , 39, 6764-71	4.4	54
202	Spectral prior image constrained compressed sensing (spectral PICCS) for photon-counting computed tomography. <i>Physics in Medicine and Biology</i> , 2016 , 61, 6707-6732	3.8	53

201	Attenuation-based estimation of patient size for the purpose of size specific dose estimation in CT. Part II. Implementation on abdomen and thorax phantoms using cross sectional CT images and scanned projection radiograph images. <i>Medical Physics</i> , 2012 , 39, 6772-8	4.4	53
200	Automatic selection of tube potential for radiation dose reduction in vascular and contrast-enhanced abdominopelvic CT. <i>American Journal of Roentgenology</i> , 2013 , 201, W297-306	5.4	49
199	Applications of dual-energy CT in urologic imaging: an update. <i>Radiologic Clinics of North America</i> , 2012 , 50, 191-205, v	2.3	46
198	Effects of CT irradiation on implantable cardiac rhythm management devices. <i>Radiology</i> , 2007 , 243, 766-768	14.5	46
197	Size-specific Dose Estimates for Chest, Abdominal, and Pelvic CT: Effect of Inpatient Variability in Water-equivalent Diameter. <i>Radiology</i> , 2015 , 276, 184-90	20.5	45
196	Technical Note: Measuring contrast- and noise-dependent spatial resolution of an iterative reconstruction method in CT using ensemble averaging. <i>Medical Physics</i> , 2015 , 42, 2261-7	4.4	45
195	Automatic exposure control in CT: are we done yet?. <i>Radiology</i> , 2005 , 237, 755-6	20.5	45
194	High-Resolution Chest Computed Tomography Imaging of the Lungs: Impact of 1024 Matrix Reconstruction and Photon-Counting Detector Computed Tomography. <i>Investigative Radiology</i> , 2019 , 54, 129-137	10.1	44
193	Observer Performance in the Detection and Classification of Malignant Hepatic Nodules and Masses with CT Image-Space Denoising and Iterative Reconstruction. <i>Radiology</i> , 2015 , 276, 465-78	20.5	41
192	Measurement of half-value layer in x-ray CT: a comparison of two noninvasive techniques. <i>Medical Physics</i> , 2000 , 27, 1915-9	4.4	40
191	How Low Can We Go in Radiation Dose for the Data-Completion Scan on a Research Whole-Body Photon-Counting Computed Tomography System. <i>Journal of Computer Assisted Tomography</i> , 2016 , 40, 663-70	2.2	40
190	Noise performance of low-dose CT: comparison between an energy integrating detector and a photon counting detector using a whole-body research photon counting CT scanner. <i>Journal of Medical Imaging</i> , 2016 , 3, 043503	2.6	39
189	Correlation between human and model observer performance for discrimination task in CT. <i>Physics in Medicine and Biology</i> , 2014 , 59, 3389-404	3.8	35
188	Noise reduction to decrease radiation dose and improve conspicuity of hepatic lesions at contrast-enhanced 80-kV hepatic CT using projection space denoising. <i>American Journal of Roentgenology</i> , 2012 , 198, 405-11	5.4	35
187	Evaluation of porcine myocardial microvascular permeability and fractional vascular volume using 64-slice helical computed tomography (CT). <i>Investigative Radiology</i> , 2007 , 42, 274-82	10.1	35
186	Renal perfusion and hemodynamics: accurate in vivo determination at CT with a 10-fold decrease in radiation dose and HYPR noise reduction. <i>Radiology</i> , 2009 , 253, 98-105	20.5	34
185	Reduction of Metal Artifacts and Improvement in Dose Efficiency Using Photon-Counting Detector Computed Tomography and Tin Filtration. <i>Investigative Radiology</i> , 2019 , 54, 204-211	10.1	33
184	Characterization of Urinary Stone Composition by Use of Third-Generation Dual-Source Dual-Energy CT With Increased Spectral Separation. <i>American Journal of Roentgenology</i> , 2015 , 205, 1203-7	5.4	30

183	Measurement of temporal resolution in dual source CT. <i>Medical Physics</i> , 2008 , 35, 764-8	4.4	29
182	Material decomposition with prior knowledge aware iterative denoising (MD-PKAID). <i>Physics in Medicine and Biology</i> , 2018 , 63, 195003	3.8	28
181	Comparison of a Photon-Counting-Detector CT with an Energy-Integrating-Detector CT for Temporal Bone Imaging: A Cadaveric Study. <i>American Journal of Neuroradiology</i> , 2018 , 39, 1733-1738	4.4	28
180	Observer Performance with Varying Radiation Dose and Reconstruction Methods for Detection of Hepatic Metastases. <i>Radiology</i> , 2018 , 289, 455-464	20.5	28
179	Dose Reduction for Sinus and Temporal Bone Imaging Using Photon-Counting Detector CT With an Additional Tin Filter. <i>Investigative Radiology</i> , 2020 , 55, 91-100	10.1	27
178	An effective noise reduction method for multi-energy CT images that exploit spatio-spectral features. <i>Medical Physics</i> , 2017 , 44, 1610-1623	4.4	26
177	Feasibility of multi-contrast imaging on dual-source photon counting detector (PCD) CT: An initial phantom study. <i>Medical Physics</i> , 2019 , 46, 4105-4115	4.4	26
176	Quantification of asymptomatic kidney stone burden by computed tomography for predicting future symptomatic stone events. <i>Urology</i> , 2015 , 85, 45-50	1.6	26
175	Technical Note: Improved CT number stability across patient size using dual-energy CT virtual monoenergetic imaging. <i>Medical Physics</i> , 2016 , 43, 513	4.4	26
174	Subjective and objective heterogeneity scores for differentiating small renal masses using contrast-enhanced CT. <i>Abdominal Radiology</i> , 2017 , 42, 1485-1492	3	25
173	Detection and Characterization of Renal Stones by Using Photon-Counting-based CT. <i>Radiology</i> , 2018 , 289, 436-442	20.5	25
172	Pilot study of detection, radiologist confidence and image quality with sinogram-affirmed iterative reconstruction at half-routine dose level. <i>Journal of Computer Assisted Tomography</i> , 2013 , 37, 203-11	2.2	25
171	Point/counterpoint. The use of bismuth breast shields for CT should be discouraged. <i>Medical Physics</i> , 2012 , 39, 2321-4	4.4	25
170	Low-dose CT image and projection dataset. <i>Medical Physics</i> , 2021 , 48, 902-911	4.4	25
169	Correlation between a 2D channelized Hotelling observer and human observers in a low-contrast detection task with multislice reading in CT. <i>Medical Physics</i> , 2017 , 44, 3990-3999	4.4	24
168	Estimation of Observer Performance for Reduced Radiation Dose Levels in CT: Eliminating Reduced Dose Levels That Are Too Low Is the First Step. <i>Academic Radiology</i> , 2017 , 24, 876-890	4.3	23
167	Differentiation of calcium oxalate monohydrate and calcium oxalate dihydrate stones using quantitative morphological information from micro-computerized and clinical computerized tomography. <i>Journal of Urology</i> , 2013 , 189, 2350-6	2.5	23
166	Estimating patient dose from CT exams that use automatic exposure control: Development and validation of methods to accurately estimate tube current values. <i>Medical Physics</i> , 2017 , 44, 4262-4275	4.4	22

165	Construction of realistic phantoms from patient images and a commercial three-dimensional printer. <i>Journal of Medical Imaging</i> , 2016 , 3, 033501	2.6	22
164	Toward biphasic computed tomography (CT) enteric contrast: material classification of luminal bismuth and mural iodine in a small-bowel phantom using dual-energy CT. <i>Journal of Computer Assisted Tomography</i> , 2012 , 36, 554-9	2.2	22
163	Symptomatic and Radiographic Manifestations of Kidney Stone Recurrence and Their Prediction by Risk Factors: A Prospective Cohort Study. <i>Journal of the American Society of Nephrology: JASN</i> , 2019 , 30, 1251-1260	12.7	21
162	Spatial resolution improvement and dose reduction potential for inner ear CT imaging using a z-axis deconvolution technique. <i>Medical Physics</i> , 2013 , 40, 061904	4.4	21
161	A deep learning- and partial least square regression-based model observer for a low-contrast lesion detection task in CT. <i>Medical Physics</i> , 2019 , 46, 2052-2063	4.4	20
160	Low kV versus dual-energy virtual monoenergetic CT imaging for proven liver lesions: what are the advantages and trade-offs in conspicuity and image quality? A pilot study. <i>Abdominal Radiology</i> , 2018 , 43, 1404-1412	3	20
159	Image-based Material Decomposition with a General Volume Constraint for Photon-Counting CT. <i>Proceedings of SPIE</i> , 2015 , 9412,	1.7	20
158	Advocating for use of the ALARA principle in the context of medical imaging fails to recognize that the risk is hypothetical and so serves to reinforce patients' fears of radiation. <i>Medical Physics</i> , 2017 , 44, 3-6	4.4	19
157	Dual-Energy CT for Quantification of Urinary Stone Composition in Mixed Stones: A Phantom Study. <i>American Journal of Roentgenology</i> , 2016 , 207, 321-9	5.4	19
156	CT Dental Artifact: Comparison of an Iterative Metal Artifact Reduction Technique with Weighted Filtered Back-Projection. <i>Acta Radiologica Open</i> , 2017 , 6, 2058460117743279	1.2	19
155	Individualized kV selection and tube current reduction in excretory phase computed tomography urography: potential for radiation dose reduction and the contribution of iterative reconstruction to image quality. <i>Journal of Computer Assisted Tomography</i> , 2013 , 37, 551-9	2.2	19
154	The Role of Dynamic (4D) CT in the Detection of Scapholunate Ligament Injury. <i>Journal of Wrist Surgery</i> , 2016 , 5, 306-310	1.1	19
153	Low-Dose CT for Craniosynostosis: Preserving Diagnostic Benefit with Substantial Radiation Dose Reduction. <i>American Journal of Neuroradiology</i> , 2017 , 38, 672-677	4.4	18
152	Technical Note: Development and validation of an open data format for CT projection data. <i>Medical Physics</i> , 2015 , 42, 6964-72	4.4	18
151	Reducing Iodine Contrast Volume in CT Angiography of the Abdominal Aorta Using Integrated Tube Potential Selection and Weight-Based Method Without Compromising Image Quality. <i>American Journal of Roentgenology</i> , 2017 , 208, 552-563	5.4	16
150	Radiation Dose Reduction in Pediatric Body CT Using Iterative Reconstruction and a Novel Image-Based Denoising Method. <i>American Journal of Roentgenology</i> , 2015 , 205, 1026-37	5.4	16
149	Utility of single-energy and dual-energy computed tomography in clot characterization: An in-vitro study. <i>Interventional Neuroradiology</i> , 2017 , 23, 279-284	1.9	15
148	Understanding, justifying, and optimizing radiation exposure for CT imaging in nephrourology. <i>Nature Reviews Urology</i> , 2019 , 16, 231-244	5.5	15

147	Dual-source photon counting detector CT with a tin filter: a phantom study on iodine quantification performance. <i>Physics in Medicine and Biology</i> , 2019 , 64, 115019	3.8	14
146	A comparison of relative proton stopping power measurements across patient size using dual- and single-energy CT. <i>Acta Oncologica</i> , 2017 , 56, 1465-1471	3.2	14
145	First Clinical Photon-counting Detector CT System: Technical Evaluation.. <i>Radiology</i> , 2021 , 212579	20.5	14
144	Reproducible imaging features of biologically aggressive gastrointestinal stromal tumors of the small bowel. <i>Abdominal Radiology</i> , 2018 , 43, 1567-1574	3	14
143	Radiation Dose Reduction in Dual-Energy CT: Does It Affect the Accuracy of Urinary Stone Characterization?. <i>American Journal of Roentgenology</i> , 2015 , 205, W172-6	5.4	13
142	Evaluation of projection- and dual-energy-based methods for metal artifact reduction in CT using a phantom study. <i>Journal of Applied Clinical Medical Physics</i> , 2018 , 19, 252-260	2.3	13
141	Radiation dose efficiency of multi-energy photon-counting-detector CT for dual-contrast imaging. <i>Physics in Medicine and Biology</i> , 2019 , 64, 245003	3.8	13
140	Estimation of signal and noise for a whole-body research photon-counting CT system. <i>Journal of Medical Imaging</i> , 2017 , 4, 023505	2.6	13
139	Synthesizing images from multiple kernels using a deep convolutional neural network. <i>Medical Physics</i> , 2020 , 47, 422-430	4.4	13
138	Reducing image noise in computed tomography (CT) colonography: effect of an integrated circuit CT detector. <i>Journal of Computer Assisted Tomography</i> , 2014 , 38, 398-403	2.2	12
137	Lesion insertion in the projection domain: Methods and initial results. <i>Medical Physics</i> , 2015 , 42, 7034-424.4	4.4	12
136	Kidney stone volume estimation from computerized tomography images using a model based method of correcting for the point spread function. <i>Journal of Urology</i> , 2012 , 188, 989-95	2.5	12
135	Lung nodule volume quantification and shape differentiation with an ultra-high resolution technique on a photon-counting detector computed tomography system. <i>Journal of Medical Imaging</i> , 2017 , 4, 043502	2.6	12
134	Photon Counting CT: Clinical Applications and Future Developments. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021 , 5, 441-452	4.2	12
133	Quantitative Knee Arthrography in a Large Animal Model of Osteoarthritis Using Photon-Counting Detector CT. <i>Investigative Radiology</i> , 2020 , 55, 349-356	10.1	11
132	Characterization of Urinary Stone Composition by Use of Whole-body, Photon-counting Detector CT. <i>Academic Radiology</i> , 2018 , 25, 1270-1276	4.3	11
131	Targeted Imaging of Renal Fibrosis Using Antibody-Conjugated Gold Nanoparticles in Renal Artery Stenosis. <i>Investigative Radiology</i> , 2018 , 53, 623-628	10.1	11
130	Bismuth shields for CT dose reduction: do they help or hurt?. <i>Journal of the American College of Radiology</i> , 2011 , 8, 878-9	3.5	11

129	Impact of number of repeated scans on model observer performance for a low-contrast detection task in computed tomography. <i>Journal of Medical Imaging</i> , 2016 , 3, 023504	2.6	11
128	Prospective Pilot Evaluation of Radiologists and Computer-aided Pulmonary Nodule Detection on Ultra-low-Dose CT With Tin Filtration. <i>Journal of Thoracic Imaging</i> , 2018 , 33, 396-401	5.6	11
127	Computed Tomography Technology-and Dose-in the 21st Century. <i>Health Physics</i> , 2019 , 116, 157-162	2.3	10
126	The influence of focal spot blooming on high-contrast spatial resolution in CT imaging. <i>Medical Physics</i> , 2015 , 42, 6011-20	4.4	10
125	A robust noise reduction technique for time resolved CT. <i>Medical Physics</i> , 2016 , 43, 347	4.4	10
124	Assessment of Low-Contrast Resolution for the American College of Radiology Computed Tomographic Accreditation Program: What Is the Impact of Iterative Reconstruction?. <i>Journal of Computer Assisted Tomography</i> , 2015 , 39, 619-23	2.2	10
123	Dual-source multienergy CT with triple or quadruple x-ray beams. <i>Journal of Medical Imaging</i> , 2018 , 5, 033502	2.6	10
122	Quantitative Prediction of Stone Fragility From Routine Dual Energy CT: Ex vivo proof of Feasibility. <i>Academic Radiology</i> , 2016 , 23, 1545-1552	4.3	10
121	Selection of optimal tube potential settings for dual-energy CT virtual mono-energetic imaging of iodine in the abdomen. <i>Abdominal Radiology</i> , 2017 , 42, 2289-2296	3	9
120	Improving iodine contrast to noise ratio using virtual monoenergetic imaging and prior-knowledge-aware iterative denoising (mono-PKAID). <i>Physics in Medicine and Biology</i> , 2019 , 64, 105014	3.8	9
119	Intrarenal fat deposition does not interfere with the measurement of single-kidney perfusion in obese swine using multi-detector computed tomography. <i>Journal of Cardiovascular Computed Tomography</i> , 2018 , 12, 149-152	2.8	9
118	Use of CT dose notification and alert values in routine clinical practice. <i>Journal of the American College of Radiology</i> , 2014 , 11, 450-5	3.5	9
117	Experimental determination of section sensitivity profiles and image noise in electron beam computed tomography. <i>Medical Physics</i> , 1999 , 26, 287-95	4.4	9
116	Improved coronary calcification quantification using photon-counting-detector CT: an ex vivo study in cadaveric specimens. <i>European Radiology</i> , 2021 , 31, 6621-6630	8	9
115	Ability of Dual-Energy CT to Detect Silicone Gel Breast Implant Rupture and Nodal Silicone Spread. <i>American Journal of Roentgenology</i> , 2019 , 212, 933-942	5.4	9
114	Deep-learning-based direct inversion for material decomposition. <i>Medical Physics</i> , 2020 , 47, 6294-6309	4.4	8
113	Arterial Wall Perfusion Measured with Photon Counting Spectral X-ray CT. <i>Proceedings of SPIE</i> , 2016 , 9967,	1.7	8
112	The Role of the Medical Physicist in Managing Radiation Dose and Communicating Risk in CT. <i>American Journal of Roentgenology</i> , 2016 , 206, 1241-4	5.4	8

111	Findings of CT-Derived Bone Strength Assessment in Inflammatory Bowel Disease Patients Undergoing CT Enterography in Clinical Practice. <i>Inflammatory Bowel Diseases</i> , 2019 , 25, 1072-1079	4.5	8
110	A Universal Protocol for Abdominal CT Examinations Performed on a Photon-Counting Detector CT System: A Feasibility Study. <i>Investigative Radiology</i> , 2020 , 55, 226-232	10.1	8
109	Dual-Energy CT Monitoring of Cryoablation Zone Growth in the Spinal Column and Bony Pelvis: A Laboratory Study. <i>Journal of Vascular and Interventional Radiology</i> , 2019 , 30, 1496-1503	2.4	7
108	Automated assessment of renal cortical surface roughness from computerized tomography images and its association with age. <i>Academic Radiology</i> , 2014 , 21, 1441-5	4.3	7
107	The measurement of radiation dose profiles for electron-beam computed tomography using film dosimetry. <i>Medical Physics</i> , 1994 , 21, 1287-91	4.4	7
106	Impact of Photon Counting Detector Technology on kV Selection and Diagnostic Workflow in CT. <i>Proceedings of SPIE</i> , 2018 , 10573,	1.7	7
105	Shoulder mechanical impingement risk associated with manual wheelchair tasks in individuals with spinal cord injury. <i>Clinical Biomechanics</i> , 2020 , 71, 221-229	2.2	7
104	Dual-Source Multi-Energy CT with Triple or Quadruple X-ray Beams. <i>Proceedings of SPIE</i> , 2016 , 9783,	1.7	7
103	Estimating a size-specific dose for helical head CT examinations using Monte Carlo simulation methods. <i>Medical Physics</i> , 2019 , 46, 902-912	4.4	7
102	Clinical utility of virtual noncalcium dual-energy CT in imaging of the pelvis and hip. <i>Skeletal Radiology</i> , 2019 , 48, 1833-1842	2.7	6
101	Localization of liver lesions in abdominal CT imaging: I. Correlation of human observer performance between anatomical and uniform backgrounds. <i>Physics in Medicine and Biology</i> , 2019 , 64, 105011	3.8	6
100	Construction of Realistic Liver Phantoms from Patient Images using 3D Printer and Its Application in CT Image Quality Assessment. <i>Proceedings of SPIE</i> , 2015 , 2015,	1.7	6
99	Validation of imaging-based quantification of glenohumeral joint kinematics using an unmodified clinical biplane fluoroscopy system. <i>Journal of Biomechanics</i> , 2018 , 71, 306-312	2.9	6
98	Estimating lung, breast, and effective dose from low-dose lung cancer screening CT exams with tube current modulation across a range of patient sizes. <i>Medical Physics</i> , 2018 , 45, 4667-4682	4.4	6
97	Lesion Insertion in Projection Domain for Computed Tomography Image Quality Assessment. <i>Proceedings of SPIE</i> , 2015 , 9412,	1.7	6
96	Use of a channelized Hotelling observer to assess CT image quality and optimize dose reduction for iteratively reconstructed images. <i>Journal of Medical Imaging</i> , 2017 , 4, 031213	2.6	6
95	Impact of prior information on material decomposition in dual- and multienergy computed tomography. <i>Journal of Medical Imaging</i> , 2019 , 6, 013503	2.6	6
94	Ultra-High Resolution Photon-Counting Detector CT Reconstruction using Spectral Prior Image Constrained Compressed-Sensing (UHR-SPICCS). <i>Proceedings of SPIE</i> , 2018 , 10573,	1.7	6

93	Three-Material Decomposition in Multi-energy CT: Impact of Prior Information on Noise and Bias. <i>Proceedings of SPIE</i> , 2018 , 10573,	1.7	6
92	Simulation of CT images reconstructed with different kernels using a convolutional neural network and its implications for efficient CT workflow 2019 ,		6
91	Quantitative accuracy and dose efficiency of dual-contrast imaging using dual-energy CT: a phantom study. <i>Medical Physics</i> , 2020 , 47, 441-456	4.4	6
90	Observer Performance for Detection of Pulmonary Nodules at Chest CT over a Large Range of Radiation Dose Levels. <i>Radiology</i> , 2020 , 297, 699-707	20.5	6
89	To Scan or not to Scan: Consideration of Medical Benefit in the Justification of CT Scanning. <i>Health Physics</i> , 2016 , 110, 287-90	2.3	6
88	Lead Shielding in Pediatric Chest CT: Effect of Apron Placement Outside the Scan Volume on Radiation Dose Reduction. <i>American Journal of Roentgenology</i> , 2019 , 212, 151-156	5.4	6
87	Theoretical and experimental analysis of photon counting detector CT for proton stopping power prediction. <i>Medical Physics</i> , 2018 , 45, 5186-5196	4.4	6
86	Full field-of-view, high-resolution, photon-counting detector CT: technical assessment and initial patient experience. <i>Physics in Medicine and Biology</i> , 2021 , 66,	3.8	6
85	Renal Adiposity Does not Preclude Quantitative Assessment of Renal Function Using Dual-Energy Multidetector CT in Mildly Obese Human Subjects. <i>Academic Radiology</i> , 2019 , 26, 1488-1494	4.3	5
84	Risks, benefits, and risk reduction strategies in thoracic CT imaging. <i>Seminars in Respiratory and Critical Care Medicine</i> , 2014 , 35, 83-90	3.9	5
83	Determination of Optimal Image Type and Lowest Detectable Concentration for Iodine Detection on a Photon Counting Detector-Based Multi-Energy CT System. <i>Proceedings of SPIE</i> , 2018 , 10573,	1.7	5
82	Electrocardiogram-Gated Computed Tomography with Coronary Angiography for Cardiac Substructure Delineation and Sparing in Patients with Mediastinal Lymphomas Treated with Radiation Therapy. <i>Practical Radiation Oncology</i> , 2020 , 10, 104-111	2.8	5
81	Individualized Delay for Abdominal Computed Tomography Angiography Bolus-Tracking Based on Sequential Monitoring: Increased Aortic Contrast Permits Decreased Injection Rate and Lower Iodine Dose. <i>Journal of Computer Assisted Tomography</i> , 2019 , 43, 612-618	2.2	5
80	Evaluation of Lower-Dose Spiral Head CT for Detection of Intracranial Findings Causing Neurologic Deficits. <i>American Journal of Neuroradiology</i> , 2019 , 40, 1855-1863	4.4	5
79	Clinical Assessment of Metal Artifact Reduction Methods in Dual-Energy CT Examinations of Instrumented Spines. <i>American Journal of Roentgenology</i> , 2019 , 212, 395-401	5.4	5
78	Consistency of Renal Stone Volume Measurements Across CT Scanner Model and Reconstruction Algorithm Configurations. <i>American Journal of Roentgenology</i> , 2017 , 209, 116-121	5.4	4
77	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. <i>Physics in Medicine and Biology</i> , 2019 , 64, 105012	3.8	4
76	Use of ionizing radiation in screening examinations for coronary artery calcium and cancers of the lung, colon, and breast. <i>Seminars in Roentgenology</i> , 2015 , 50, 148-60	0.8	4

75	Multi-energy CT imaging for large patients using dual-source photon-counting detector CT. <i>Physics in Medicine and Biology</i> , 2020 , 65, 17NT01	3.8	4
74	The evolving role of imaging for small bowel neuroendocrine neoplasms: estimated impact of imaging and disease-free survival in a retrospective observational study. <i>Abdominal Radiology</i> , 2020 , 45, 623-631	3	4
73	Validation of a Projection-domain Insertion of Liver Lesions into CT Images. <i>Academic Radiology</i> , 2016 , 23, 1221-9	4.3	4
72	Evaluation of a projection-domain lung nodule insertion technique in thoracic CT. <i>Proceedings of SPIE</i> , 2016 , 9783,	1.7	4
71	Estimating Patient Organ Dose with Computed Tomography: A Review of Present Methodology and Required DICOM Information A Joint Report of AAPM Task Group 246 and the European Federation of Organizations for Medical Physics (EFOMP) 2019 ,		4
70	An Open Library of CT Patient Projection Data. <i>Proceedings of SPIE</i> , 2016 , 9783,	1.7	4
69	Estimation of signal and noise for a whole-body photon counting research CT system. <i>Proceedings of SPIE</i> , 2016 , 9783,	1.7	4
68	Technical Note: kV-independent coronary calcium scoring: A phantom evaluation of score accuracy and potential radiation dose reduction. <i>Medical Physics</i> , 2021 , 48, 1307-1314	4.4	4
67	Dual-Contrast Biphasic Liver Imaging With Iodine and Gadolinium Using Photon-Counting Detector Computed Tomography: An Exploratory Animal Study. <i>Investigative Radiology</i> , 2021 ,	10.1	4
66	CT Noise-Reduction Methods for Lower-Dose Scanning: Strengths and Weaknesses of Iterative Reconstruction Algorithms and New Techniques. <i>Radiographics</i> , 2021 , 41, 1493-1508	5.4	4
65	A virtual clinical trial using projection-based nodule insertion to determine radiologist reader performance in lung cancer screening CT. <i>Proceedings of SPIE</i> , 2017 , 10132,	1.7	3
64	Comparison of glenohumeral joint kinematics between manual wheelchair tasks and implications on the subacromial space: A biplane fluoroscopy study. <i>Journal of Electromyography and Kinesiology</i> , 2019 , 62, 102350	2.5	3
63	Evaluation of a photon counting Medipix3RX CZT spectral x-ray detector. <i>Proceedings of SPIE</i> , 2016 , 9969,	1.7	3
62	Practical implementation of Channelized Hotelling Observers: Effect of ROI size. <i>Proceedings of SPIE</i> , 2017 , 10132,	1.7	3
61	Determination of iodine detectability in different types of multiple-energy images for a photon-counting detector computed tomography system. <i>Journal of Medical Imaging</i> , 2019 , 6, 043501	2.6	3
60	Deep-learning-based model observer for a lung nodule detection task in computed tomography. <i>Journal of Medical Imaging</i> , 2020 , 7, 042807	2.6	3
59	Measuring arterial wall perfusion using photon-counting computed tomography (CT): improving CT number accuracy of artery wall using image deconvolution. <i>Journal of Medical Imaging</i> , 2017 , 4, 044006	2.6	3
58	Multi-contrast imaging on dual-source photon-counting-detector (PCD) CT 2019 ,		3

57	Prior iterative reconstruction (PIR) to lower radiation dose and preserve radiologist performance for multiphase liver CT: a multi-reader pilot study. <i>Abdominal Radiology</i> , 2020 , 45, 45-54	3	3
56	Random Search as a Neural Network Optimization Strategy for Convolutional-Neural-Network (CNN)-based Noise Reduction in CT.. <i>Proceedings of SPIE</i> , 2021 , 11596,	1.7	3
55	A New Frontier in Temporal Bone Imaging: Photon-Counting Detector CT Demonstrates Superior Visualization of Critical Anatomic Structures at Reduced Radiation Dose.. <i>American Journal of Neuroradiology</i> , 2022 ,	4.4	3
54	Technical Note: Insertion of digital lesions in the projection domain for dual-source, dual-energy CT. <i>Medical Physics</i> , 2017 , 44, 1655-1660	4.4	2
53	Evaluation of a projection-domain lung nodule insertion technique in thoracic computed tomography. <i>Journal of Medical Imaging</i> , 2017 , 4, 013510	2.6	2
52	Reducing radiation dose for multi-phase contrast-enhanced dual energy renal CT: pilot study evaluating prior iterative reconstruction. <i>Abdominal Radiology</i> , 2019 , 44, 3350-3358	3	2
51	Predicting detection performance with model observers: Fourier domain or spatial domain?. <i>Proceedings of SPIE</i> , 2016 , 9783,	1.7	2
50	Relative accuracy of spin-image-based registration of partial capitate bones in 4DCT of the wrist. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2016 , 4, 360-367 ⁹	0.9	2
49	The Clinical Impact of Accurate Cystine Calculi Characterization Using Dual-Energy Computed Tomography. <i>Case Reports in Radiology</i> , 2015 , 2015, 801021	0.6	2
48	Correlation between model observers in uniform background and human observers in patient liver background for a low-contrast detection task in CT. <i>Proceedings of SPIE</i> , 2018 , 10577,	1.7	2
47	Correlation between a deep-learning-based model observer and human observer for a realistic lung nodule localization task in chest CT 2019 ,		2
46	Reducing Heart Dose with Protons and Cardiac Substructure Sparing for Mediastinal Lymphoma Treatment. <i>International Journal of Particle Therapy</i> , 2020 , 7, 1-12	1.5	2
45	Overcoming calcium blooming and improving the quantification accuracy of percent area luminal stenosis by material decomposition of multi-energy computed tomography datasets. <i>Journal of Medical Imaging</i> , 2020 , 7, 053501	2.6	2
44	Fat quantification of the rotator cuff musculature using dual-energy CT-A pilot study. <i>European Journal of Radiology</i> , 2020 , 130, 109145	4.7	2
43	Basal Ganglia Calcification Is Associated With Local and Systemic Metabolic Mechanisms in Adult Hypoparathyroidism. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2021 , 106, 1900-1917	5.6	2
42	Automated radiomic analysis of CT images to predict likelihood of spontaneous passage of symptomatic renal stones. <i>Emergency Radiology</i> , 2021 , 28, 781-788	3	2
41	Potential Clinical Ramifications of Dose Alert on CT-Guided Interventional Procedures. <i>Journal of the American College of Radiology</i> , 2016 , 13, 542-4	3.5	2
40	Impact of Effective Detector Pixel and CT Voxel Size on Accurate Estimation of Blood Volume in Opacified Microvasculature. <i>Academic Radiology</i> , 2019 , 26, 1410-1416	4.3	2

39	Breathe New Life Into Your Chest CT Exams: Using Advanced Acquisition and Postprocessing Techniques. <i>Current Problems in Diagnostic Radiology</i> , 2019 , 48, 152-160	1.6	2
38	Benefits of iterative metal artifact reduction and dual-energy CT towards mitigating artifact in the setting of total shoulder prostheses. <i>Skeletal Radiology</i> , 2021 , 50, 51-58	2.7	2
37	High Resolution, Full Field-of-View, Whole Body Photon-Counting Detector CT: System Assessment and Initial Experience.. <i>Proceedings of SPIE</i> , 2021 , 11595,	1.7	2
36	Evaluating a Convolutional Neural Network Noise Reduction Method When Applied to CT Images Reconstructed Differently Than Training Data. <i>Journal of Computer Assisted Tomography</i> , 2021 , 45, 544-551	2.2	2
35	Computed tomography turns 50. <i>Physics Today</i> , 2021 , 74, 34-40	0.9	2
34	Detection of increased vasa vasorum in artery walls: Improving CT number accuracy using image deconvolution. <i>Proceedings of SPIE</i> , 2017 , 10132,	1.7	1
33	A multi-reader in vitro 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 (. <i>Acta Radiologica</i> , 2017 , 58, 1012-1019	2	1
32	Image quality in abdominal CT using an iodine contrast reduction algorithm employing patient size and weight and low kV CT technique. <i>Acta Radiologica</i> , 2020 , 61, 1186-1195	2	1
31	Technical Note: Increased photon starvation artifacts at low helical pitch in ultra-low-dose CT. <i>Medical Physics</i> , 2019 , 46, 5538-5543	4.4	1
30	Impact of Number of Repeated Scans on Model Observer Performance for a Low-contrast Detection Task in CT. <i>Proceedings of SPIE</i> , 2015 , 9416,	1.7	1
29	3D-3D Registration of partial capitate bones using spin-images. <i>Proceedings of SPIE</i> , 2013 , 8671,	1.7	1
28	Phase-contrast imaging with a compact x-ray light source: system design. <i>Journal of Medical Imaging</i> , 2017 , 4, 043503	2.6	1
27	Evaluation of a photon counting Medipix3RX cadmium zinc telluride spectral x-ray detector. <i>Journal of Medical Imaging</i> , 2018 , 5, 043503	2.6	1
26	Imaging evaluation and treatment of nephrolithiasis: an update. <i>Minnesota Medicine</i> , 2010 , 93, 48-51	0.3	1
25	Noise reduction in CT image using prior knowledge aware iterative denoising. <i>Physics in Medicine and Biology</i> , 2020 ,	3.8	1
24	Wave optics simulation of grating-based X-ray phase-contrast imaging using 4D Mouse Whole Body (MOBY) phantom. <i>Medical Physics</i> , 2020 , 47, 5761-5771	4.4	1
23	Deep-learning-based direct synthesis of low-energy virtual monoenergetic images with multi-energy CT. <i>Journal of Medical Imaging</i> , 2021 , 8, 052104	2.6	1
22	Clinical evaluation of a phantom-based deep convolutional neural network for whole-body-low-dose and ultra-low-dose CT skeletal surveys. <i>Skeletal Radiology</i> , 2022 , 51, 145-151	2.7	1

21	The utility of a dual-phase, dual-energy CT protocol in patients presenting with overt gastrointestinal bleeding. <i>Acta Radiologica Open</i> , 2021 , 10, 20584601211030658	1.2	1
20	Technical Note: Display window setting: An important factor for detecting subtle but clinically relevant artifacts in daily CT quality control. <i>Medical Physics</i> , 2016 , 43, 6413	4.4	1
19	Robustness of Textural Features to Predict Stone Fragility Across Computed Tomography Acquisition and Reconstruction Parameters. <i>Academic Radiology</i> , 2019 , 26, 885-892	4.3	1
18	Evaluation of Pseudoreader Study Designs to Estimate Observer Performance Results as an Alternative to Fully Crossed, Multireader, Multicase Studies. <i>Academic Radiology</i> , 2020 , 27, 244-252	4.3	1
17	Clinical evaluation of a new adaptive iterative metal artifact reduction method in whole-body low-dose CT skeletal survey examinations. <i>Skeletal Radiology</i> , 2021 , 50, 149-157	2.7	1
16	X-Ray Transmittance Modeling-Based Material Decomposition Using a Photon-Counting Detector CT System. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021 , 5, 508-516	4.2	1
15	A Web-Based Software Platform for Efficient and Quantitative CT Image Quality Assessment and Protocol Optimization. <i>Proceedings of SPIE</i> , 2021 , 11595,	1.7	1
14	Energy-integrating-detector multi-energy CT: Implementation and a phantom study. <i>Medical Physics</i> , 2021 , 48, 4857-4871	4.4	1
13	Deep learning enabled ultra-fast-pitch acquisition in clinical X-ray computed tomography. <i>Medical Physics</i> , 2021 , 48, 5712-5726	4.4	1
12	A Pilot Study to Estimate the Impact of High Matrix Image Reconstruction on Chest Computed Tomography. <i>Journal of Clinical Imaging Science</i> , 2021 , 11, 52	1.1	1
11	Utility of an automatic adaptive iterative metal artifact reduction AiMAR algorithm in improving CT imaging of patients with hip prostheses evaluated for suspected bladder malignancy.. <i>Abdominal Radiology</i> , 2022 , 47, 2158	3	1
10	Dependence of Water-equivalent Diameter and Size-specific Dose Estimates on CT Tube Potential.. <i>Radiology</i> , 2022 , 210860	20.5	0
9	An interactive eye-tracking system for measuring radiologists' visual fixations in volumetric CT images: Implementation and initial eye-tracking accuracy validation. <i>Medical Physics</i> , 2021 , 48, 6710-6723	4.4	0
8	Medical Imaging Physics, by W. R. Hendee and E. R. Ritenour. <i>Medical Physics</i> , 1994 , 21, 328-329	4.4	
7	Procedure for optimal implementation of automatic tube potential selection in pediatric CT to reduce radiation dose and improve workflow. <i>Journal of Applied Clinical Medical Physics</i> , 2021 , 22, 194-202	2.3	
6	Implementation and experimental evaluation of Mega-voltage fan-beam CT using a linear accelerator. <i>Radiation Oncology</i> , 2021 , 16, 139	4.2	
5	The feasibility of low iodine dynamic CT angiography with test bolus for evaluation of lower extremity peripheral artery disease. <i>Vascular</i> , 2021 , 29, 927-937	1.3	
4	Empirical beam hardening and ring artifact correction for x-ray grating interferometry (EBHC-GI). <i>Medical Physics</i> , 2021 , 48, 1327-1340	4.4	

- 3 Concern about a recently published paper in the European Journal of Radiology. *European Journal of Radiology*, **2018**, 109, 203 4.7
- 2 Reader Performance as a Function of Patient Size for the Detection of Hepatic Metastases. *Journal of Computer Assisted Tomography*, **2021**, 45, 812-819 2.2
- 1 Material Decomposition and Post-processing: History and Basic Principles. *Medical Radiology*, **2022**, 3-14 0.2