Cynthia H Mccollough

List of Publications by Year in descending order

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271 papers

16,885 citations

63 h-index 16650

275 all docs

275 docs citations

275 times ranked

9167 citing authors

g-index

#	Article	IF	CITATIONS
1	First performance evaluation of a dual-source CT (DSCT) system. European Radiology, 2006, 16, 256-268.	4.5	1,296
2	Dual- and Multi-Energy CT: Principles, Technical Approaches, and Clinical Applications. Radiology, 2015, 276, 637-653.	7.3	1,092
3	CT Dose Reduction and Dose Management Tools: Overview of Available Options. Radiographics, 2006, 26, 503-512.	3.3	704
4	Strategies for Reducing Radiation Dose in CT. Radiologic Clinics of North America, 2009, 47, 27-40.	1.8	650
5	Dual-Energy CT–Based Monochromatic Imaging. American Journal of Roentgenology, 2012, 199, S9-S15.	2.2	483
6	Radiation Exposure and Pregnancy: When Should We Be Concerned?. Radiographics, 2007, 27, 909-917.	3.3	464
7	CT Dose Index and Patient Dose: They Are <i>Not</i> the Same Thing. Radiology, 2011, 259, 311-316.	7.3	377
8	Noninvasive Differentiation of Uric Acid versus Non–Uric Acid Kidney Stones Using Dual-Energy CT. Academic Radiology, 2007, 14, 1441-1447.	2.5	364
9	Performance evaluation of a multi-slice CT system. Medical Physics, 1999, 26, 2223-2230.	3.0	348
10	Radiation dose reduction in computed tomography: techniques and future perspective. Imaging in Medicine, 2009, 1, 65-84.	0.0	296
11	Virtual monochromatic imaging in dualâ€source dualâ€energy CT: Radiation dose and image quality. Medical Physics, 2011, 38, 6371-6379.	3.0	282
12	Photon-counting Detector CT: System Design and Clinical Applications of an Emerging Technology. Radiographics, 2019, 39, 729-743.	3.3	270
13	Coronary Artery Calcium: A Multi-institutional, Multimanufacturer International Standard for Quantification at Cardiac CT. Radiology, 2007, 243, 527-538.	7.3	256
14	Quantitative imaging of element composition and mass fraction using dualâ€energy CT: Threeâ€material decomposition. Medical Physics, 2009, 36, 1602-1609.	3.0	253
15	Achieving Routine Submillisievert CT Scanning: Report from the Summit on Management of Radiation Dose in CT. Radiology, 2012, 264, 567-580.	7.3	246
16	Calculation of effective dose. Medical Physics, 2000, 27, 828-837.	3.0	236
17	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
18	Identification of Intraarticular and Periarticular Uric Acid Crystals with Dual-Energy CT: Initial Evaluation. Radiology, 2011, 261, 516-524.	7.3	211

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19	Human Imaging With Photon Counting–Based Computed Tomography at Clinical Dose Levels. Investigative Radiology, 2016, 51, 421-429.	6.2	205
20	Automatic selection of tube potential for radiation dose reduction in CT: A general strategy. Medical Physics, 2010, 37, 234-243.	3.0	201
21	Adaptive nonlocal means filtering based on local noise level for CT denoising. Medical Physics, 2013, 41, 011908.	3.0	201
22	First Clinical Photon-counting Detector CT System: Technical Evaluation. Radiology, 2022, 303, 130-138.	7.3	201
23	Dose Performance of a 64-Channel Dual-Source CT Scanner1. Radiology, 2007, 243, 775-784.	7.3	192
24	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
25	Optimal Tube Potential for Radiation Dose Reduction in Pediatric CT: Principles, Clinical Implementations, and Pitfalls. Radiographics, 2011, 31, 835-848.	3.3	179
26	Dual-Source Dual-Energy CT With Additional Tin Filtration: Dose and Image Quality Evaluation in Phantoms and In Vivo. American Journal of Roentgenology, 2010, 195, 1164-1174.	2.2	170
27	Relationship between Noise, Dose, and Pitch in Cardiac Multi–Detector Row CT. Radiographics, 2006, 26, 1785-1794.	3.3	159
28	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
29	Prospective Blinded Comparison of Wireless Capsule Endoscopy and Multiphase CT Enterography in Obscure Gastrointestinal Bleeding. Radiology, 2011, 260, 744-751.	7.3	150
30	Image quality optimization and evaluation of linearly mixed images in dualâ€source, dualâ€energy CT. Medical Physics, 2009, 36, 1019-1024.	3.0	147
31	In Defense of Body CT. American Journal of Roentgenology, 2009, 193, 28-39.	2.2	144
32	The phantom portion of the American College of Radiology (ACR) Computed Tomography (CT) accreditation program: Practical tips, artifact examples, and pitfalls to avoid. Medical Physics, 2004, 31, 2423-2442.	3.0	138
33	How Effective Is Effective Dose as a Predictor of Radiation Risk?. American Journal of Roentgenology, 2010, 194, 890-896.	2.2	137
34	150-μm Spatial Resolution Using Photon-Counting Detector Computed Tomography Technology. Investigative Radiology, 2018, 53, 655-662.	6.2	137
35	Appropriate Patient Selection at Abdominal Dual-Energy CT Using 80 kV: Relationship between Patient Size, Image Noise, and Image Quality. Radiology, 2010, 257, 732-742.	7.3	136
36	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

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37	Answers to Common Questions About the Use and Safety of CT Scans. Mayo Clinic Proceedings, 2015, 90, 1380-1392.	3.0	128
38	State of the Art in Abdominal CT: The Limits of Iterative Reconstruction Algorithms. Radiology, 2019, 293, 491-503.	7.3	126
39	Methods for Clinical Evaluation of Noise Reduction Techniques in Abdominopelvic CT. Radiographics, 2014, 34, 849-862.	3.3	123
40	Dual-Energy Dual-Source CT With Additional Spectral Filtration Can Improve the Differentiation of Non–Uric Acid Renal Stones: An Ex Vivo Phantom Study. American Journal of Roentgenology, 2011, 196, 1279-1287.	2.2	120
41	Development and Validation of a Practical Lower-Dose-Simulation Tool for Optimizing Computed Tomography Scan Protocols. Journal of Computer Assisted Tomography, 2012, 36, 477-487.	0.9	119
42	Prediction of human observer performance in a 2â€alternative forced choice lowâ€contrast detection task using channelized Hotelling observer: Impact of radiation dose and reconstruction algorithms. Medical Physics, 2013, 40, 041908.	3.0	117
43	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
44	Assessment of Renal Hemodynamics and Function in Pigs with 64-Section Multidetector CT: Comparison with Electron-Beam CT. Radiology, 2007, 243, 405-412.	7.3	109
45	The Changing Incidence and Presentation of Urinary Stones Over 3 Decades. Mayo Clinic Proceedings, 2018, 93, 291-299.	3.0	107
46	High-Resolution Chest Computed Tomography Imaging of the Lungs. Investigative Radiology, 2019, 54, 129-137.	6.2	106
47	Dose-efficient ultrahigh-resolution scan mode using a photon counting detector computed tomography system. Journal of Medical Imaging, 2016, 3, 043504.	1.5	105
48	Maximizing Iodine Contrast-to-Noise Ratios in Abdominal CT Imaging through Use of Energy Domain Noise Reduction and Virtual Monoenergetic Dual-Energy CT. Radiology, 2015, 276, 562-570.	7.3	100
49	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
50	Patient Dose in Cardiac Computed Tomography. Herz, 2003, 28, 1-6.	1.1	90
51	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
52	Lowâ€dose CT image and projection dataset. Medical Physics, 2021, 48, 902-911.	3.0	89
53	Dose Reduction for Sinus and Temporal Bone Imaging Using Photon-Counting Detector CT With an Additional Tin Filter. Investigative Radiology, 2020, 55, 91-100.	6.2	86
54	Electronic Noise in CT Detectors: Impact on Image Noise and Artifacts. American Journal of Roentgenology, 2013, 201, W626-W632.	2,2	83

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55	Correlation between model observer and human observer performance in CT imaging when lesion location is uncertain. Medical Physics, 2013, 40, 081908.	3.0	83
56	Anatomic modeling using 3D printing: quality assurance and optimization. 3D Printing in Medicine, 2017, 3, 6.	3.1	83
57	Attenuationâ€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. Medical Physics, 2012, 39, 6764-6771.	3.0	76
58	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
59	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
60	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. Journal of Medical Imaging, 2016, 3, 043503.	1.5	74
61	Comparison of a Photon-Counting-Detector CT with an Energy-Integrating-Detector CT for Temporal Bone Imaging: A Cadaveric Study. American Journal of Neuroradiology, 2018, 39, 1733-1738.	2.4	69
62	Photon Counting CT: Clinical Applications and Future Developments. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 441-452.	3.7	68
63	Attenuationâ€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. Medical Physics, 2012, 39, 6772-6778.	3.0	67
64	Size-specific Dose Estimates for Chest, Abdominal, and Pelvic CT: Effect of Intrapatient Variability in Water-equivalent Diameter. Radiology, 2015, 276, 184-190.	7.3	66
65	Effects of CT Irradiation on Implantable Cardiac Rhythm Management Devices1. Radiology, 2007, 243, 766-774.	7.3	61
66	Automatic Selection of Tube Potential for Radiation Dose Reduction in Vascular and Contrast-Enhanced Abdominopelvic CT. American Journal of Roentgenology, 2013, 201, W297-W306.	2.2	58
67	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
68	Automatic Exposure Control in CT: Are We Done Yet?. Radiology, 2005, 237, 755-756.	7.3	53
69	Applications of Dual-Energy CT in Urologic Imaging: An Update. Radiologic Clinics of North America, 2012, 50, 191-205.	1.8	53
70	Technical Note: Measuring contrast―and noiseâ€dependent spatial resolution of an iterative reconstruction method in CT using ensemble averaging. Medical Physics, 2015, 42, 2261-2267.	3.0	52
71	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
72	Symptomatic and Radiographic Manifestations of Kidney Stone Recurrence and Their Prediction by Risk Factors: A Prospective Cohort Study. Journal of the American Society of Nephrology: JASN, 2019, 30, 1251-1260.	6.1	48

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73	Measurement of half-value layer in x-ray CT: A comparison of two noninvasive techniques. Medical Physics, 2000, 27, 1915-1919.	3.0	47
74	How Low Can We Go in Radiation Dose for the Data-Completion Scan on a Research Whole-Body Photon-Counting Computed Tomography System. Journal of Computer Assisted Tomography, 2016, 40, 663-670.	0.9	47
75	Detection and Characterization of Renal Stones by Using Photon-Counting–based CT. Radiology, 2018, 289, 436-442.	7. 3	43
76	A New Frontier in Temporal Bone Imaging: Photon-Counting Detector CT Demonstrates Superior Visualization of Critical Anatomic Structures at Reduced Radiation Dose. American Journal of Neuroradiology, 2022, 43, 579-584.	2.4	43
77	Correlation between human and model observer performance for discrimination task in CT. Physics in Medicine and Biology, 2014, 59, 3389-3404.	3.0	41
78	Quantification of Asymptomatic Kidney Stone Burden by Computed Tomography for Predicting Future Symptomatic Stone Events. Urology, 2015, 85, 45-50.	1.0	41
79	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
80	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
81	Observer Performance with Varying Radiation Dose and Reconstruction Methods for Detection of Hepatic Metastases. Radiology, 2018, 289, 455-464.	7.3	40
82	Material decomposition with prior knowledge aware iterative denoising (MD-PKAID). Physics in Medicine and Biology, 2018, 63, 195003.	3.0	39
83	Estimation of Observer Performance for Reduced Radiation Dose Levels in CT. Academic Radiology, 2017, 24, 876-890.	2.5	38
84	Evaluation of Porcine Myocardial Microvascular Permeability and Fractional Vascular Volume Using 64-Slice Helical Computed Tomography (CT). Investigative Radiology, 2007, 42, 274-282.	6.2	37
85	Noise Reduction to Decrease Radiation Dose and Improve Conspicuity of Hepatic Lesions at Contrast-Enhanced 80-kV Hepatic CT Using Projection Space Denoising. American Journal of Roentgenology, 2012, 198, 405-411.	2.2	37
86	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
87	Correlation between a 2D channelized Hotelling observer and human observers in a lowâ€contrast detection task with multislice reading in ⟨scp⟩CT⟨/scp⟩. Medical Physics, 2017, 44, 3990-3999.	3.0	37
88	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
89	Renal Perfusion and Hemodynamics: Accurate in Vivo Determination at CT with a 10-Fold Decrease in Radiation Dose and HYPR Noise Reduction. Radiology, 2009, 253, 98-105.	7. 3	36
90	Characterization of Urinary Stone Composition by Use of Third-Generation Dual-Source Dual-Energy CT With Increased Spectral Separation. American Journal of Roentgenology, 2015, 205, 1203-1207.	2.2	36

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91	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
92	Measurement of temporal resolution in dual source CT. Medical Physics, 2008, 35, 764-768.	3.0	34
93	Subjective and objective heterogeneity scores for differentiating small renal masses using contrast-enhanced CT. Abdominal Radiology, 2017, 42, 1485-1492.	2.1	34
94	Estimating the Clinical Impact of Photon-Counting-Detector CT in Diagnosing Usual Interstitial Pneumonia. Investigative Radiology, 2022, 57, 734-741.	6.2	34
95	The Role of Dynamic (4D) CT in the Detection of Scapholunate Ligament Injury. Journal of Wrist Surgery, 2016, 05, 306-310.	0.7	33
96	Differentiation of Calcium Oxalate Monohydrate and Calcium Oxalate Dihydrate Stones Using Quantitative Morphological Information from Micro-Computerized and Clinical Computerized Tomography. Journal of Urology, 2013, 189, 2350-2356.	0.4	31
97	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
98	Spatial resolution improvement and dose reduction potential for inner ear CT imaging using a zâ€axis deconvolution technique. Medical Physics, 2013, 40, 061904.	3.0	30
99	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. Abdominal Radiology, 2018, 43, 1404-1412.	2.1	30
100	Low-Dose CT for Craniosynostosis: Preserving Diagnostic Benefit with Substantial Radiation Dose Reduction. American Journal of Neuroradiology, 2017, 38, 672-677.	2.4	29
101	CT Dental Artifact: Comparison of an Iterative Metal Artifact Reduction Technique with Weighted Filtered Back-Projection. Acta Radiologica Open, 2017, 6, 205846011774327.	0.6	29
102	Pilot Study of Detection, Radiologist Confidence and Image Quality With Sinogram-Affirmed Iterative Reconstruction at Half–Routine Dose Level. Journal of Computer Assisted Tomography, 2013, 37, 203-211.	0.9	28
103	Construction of realistic phantoms from patient images and a commercial three-dimensional printer. Journal of Medical Imaging, 2016, 3, 033501.	1.5	28
104	Understanding, justifying, and optimizing radiation exposure for CT imaging in nephrourology. Nature Reviews Urology, 2019, 16, 231-244.	3.8	28
105	Advocating for use of the <scp>ALARA</scp> principle in the context of medical imaging fails to recognize that the risk is hypothetical and so serves to reinforce patients' fears of radiation. Medical Physics, 2017, 44, 3-6.	3.0	27
106	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
107	Evaluation of projection†and dualâ€energyâ€based methods for metal artifact reduction in <scp>CT</scp> using a phantom study. Journal of Applied Clinical Medical Physics, 2018, 19, 252-260.	1.9	27
108	A deep learning†and partial least square regressionâ€based model observer for a lowâ€contrast lesion detection task in CT. Medical Physics, 2019, 46, 2052-2063.	3.0	27

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109	The use of bismuth breast shields for CT should be discouraged. Medical Physics, 2012, 39, 2321-2324.	3.0	27
110	Toward Biphasic Computed Tomography (CT) Enteric Contrast. Journal of Computer Assisted Tomography, 2012, 36, 554-559.	0.9	26
111	Synthesizing images from multiple kernels using a deep convolutional neural network. Medical Physics, 2020, 47, 422-430.	3.0	26
112	Deepâ€learningâ€based direct inversion for material decomposition. Medical Physics, 2020, 47, 6294-6309.	3.0	26
113	Improved visualization of the wrist at lower radiation dose with photon-counting-detector CT. Skeletal Radiology, 2023, 52, 23-29.	2.0	26
114	Technical Note: Development and validation of an open data format for CT projection data. Medical Physics, 2015, 42, 6964-6972.	3.0	25
115	Dual-Contrast Biphasic Liver Imaging With Iodine and Gadolinium Using Photon-Counting Detector Computed Tomography. Investigative Radiology, 2022, 57, 122-129.	6.2	25
116	Image-based material decomposition with a general volume constraint for photon-counting CT. Proceedings of SPIE, 2015, 9412, .	0.8	24
117	Dual-Energy CT for Quantification of Urinary Stone Composition in Mixed Stones: A Phantom Study. American Journal of Roentgenology, 2016, 207, 321-329.	2.2	24
118	A Universal Protocol for Abdominal CT Examinations Performed on a Photon-Counting Detector CT System. Investigative Radiology, 2020, 55, 226-232.	6.2	24
119	A comparison of relative proton stopping power measurements across patient size using dual- and single-energy CT. Acta Oncol \tilde{A}^3 gica, 2017, 56, 1465-1471.	1.8	22
120	Radiation dose efficiency of multi-energy photon-counting-detector CT for dual-contrast imaging. Physics in Medicine and Biology, 2019, 64, 245003.	3.0	22
121	Quantitative Knee Arthrography in a Large Animal Model of Osteoarthritis Using Photon-Counting Detector CT. Investigative Radiology, 2020, 55, 349-356.	6.2	22
122	Dealing with Uncertainty in CT Images. Radiology, 2016, 279, 5-10.	7.3	21
123	Reducing Iodine Contrast Volume in CT Angiography of the Abdominal Aorta Using Integrated Tube Potential Selection and Weight-Based Method Without Compromising Image Quality. American Journal of Roentgenology, 2017, 208, 552-563.	2.2	21
124	Reproducible imaging features of biologically aggressive gastrointestinal stromal tumors of the small bowel. Abdominal Radiology, 2018, 43, 1567-1574.	2.1	21
125	Prospective Pilot Evaluation of Radiologists and Computer-aided Pulmonary Nodule Detection on Ultra–low-Dose CT With Tin Filtration. Journal of Thoracic Imaging, 2018, 33, 396-401.	1.5	21
126	Individualized kV Selection and Tube Current Reduction in Excretory Phase Computed Tomography Urography. Journal of Computer Assisted Tomography, 2013, 37, 551-559.	0.9	20

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127	Clinical Assessment of Metal Artifact Reduction Methods in Dual-Energy CT Examinations of Instrumented Spines. American Journal of Roentgenology, 2019, 212, 395-401.	2.2	20
128	Lung nodule volume quantification and shape differentiation with an ultra-high resolution technique on a photon-counting detector computed tomography system. Journal of Medical Imaging, 2017, 4, 1.	1.5	20
129	Kidney Stone Volume Estimation from Computerized Tomography Images Using a Model Based Method of Correcting for the Point Spread Function. Journal of Urology, 2012, 188, 989-995.	0.4	19
130	Radiation Dose Reduction in Pediatric Body CT Using Iterative Reconstruction and a Novel Image-Based Denoising Method. American Journal of Roentgenology, 2015, 205, 1026-1037.	2.2	19
131	Improving iodine contrast to noise ratio using virtual monoenergetic imaging and prior-knowledge-aware iterative denoising (mono-PKAID). Physics in Medicine and Biology, 2019, 64, 105014.	3.0	19
132	Reducing Image Noise in Computed Tomography (CT) Colonography. Journal of Computer Assisted Tomography, 2014, 38, 398-403.	0.9	18
133	Lesion insertion in the projection domain: Methods and initial results. Medical Physics, 2015, 42, 7034-7042.	3.0	18
134	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
135	Shoulder mechanical impingement risk associated with manual wheelchair tasks in individuals with spinal cord injury. Clinical Biomechanics, 2020, 71, 221-229.	1.2	18
136	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
137	Characterization of Urinary Stone Composition by Use of Whole-body, Photon-counting Detector CT. Academic Radiology, 2018, 25, 1270-1276.	2.5	17
138	Computed Tomography Technology—and Dose—in the 21st Century. Health Physics, 2019, 116, 157-162.	0.5	17
139	Evaluating a Convolutional Neural Network Noise Reduction Method When Applied to CT Images Reconstructed Differently Than Training Data. Journal of Computer Assisted Tomography, 2021, 45, 544-551.	0.9	17
140	Lead Shielding in Pediatric Chest CT: Effect of Apron Placement Outside the Scan Volume on Radiation Dose Reduction. American Journal of Roentgenology, 2019, 212, 151-156.	2.2	16
141	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
142	Targeted Imaging of Renal Fibrosis Using Antibody-Conjugated Gold Nanoparticles in Renal Artery Stenosis. Investigative Radiology, 2018, 53, 623-628.	6.2	15
143	Ability of Dual-Energy CT to Detect Silicone Gel Breast Implant Rupture and Nodal Silicone Spread. American Journal of Roentgenology, 2019, 212, 933-942.	2.2	15
144	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

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145	Bismuth Shields for CT Dose Reduction: Do They Help or Hurt?. Journal of the American College of Radiology, 2011, 8, 878-879.	1.8	14
146	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
147	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
148	Estimation of signal and noise for a whole-body research photon-counting CT system. Journal of Medical Imaging, 2017, 4, 023505.	1.5	14
149	Multi-energy CT imaging for large patients using dual-source photon-counting detector CT. Physics in Medicine and Biology, 2020, 65, 17NT01.	3.0	14
150	Dual-source multienergy CT with triple or quadruple x-ray beams. Journal of Medical Imaging, 2018, 5, 1.	1.5	14
151	Automated Assessment of Renal Cortical Surface Roughness From Computerized Tomography Images and Its Association with Age. Academic Radiology, 2014, 21, 1441-1445.	2.5	13
152	The influence of focal spot blooming on highâ€contrast spatial resolution in CT imaging. Medical Physics, 2015, 42, 6011-6020.	3.0	13
153	The Role of the Medical Physicist in Managing Radiation Dose and Communicating Risk in CT. American Journal of Roentgenology, 2016, 206, 1241-1244.	2.2	13
154	Quantitative accuracy and dose efficiency of dualâ€contrast imaging using dualâ€energy CT: a phantom study. Medical Physics, 2020, 47, 441-456.	3.0	13
155	Use of CT Dose Notification and Alert Values in Routine Clinical Practice. Journal of the American College of Radiology, 2014, 11, 450-455.	1.8	12
156	Assessment of Low-Contrast Resolution for the American College of Radiology Computed Tomographic Accreditation Program. Journal of Computer Assisted Tomography, 2015, 39, 619-623.	0.9	12
157	Arterial wall perfusion measured with photon counting spectral x-ray CT. Proceedings of SPIE, 2016, 9967, .	0.8	12
158	Quantitative Prediction of Stone Fragility From Routine Dual Energy CT. Academic Radiology, 2016, 23, 1545-1552.	2.5	12
159	Computed tomography turns 50. Physics Today, 2021, 74, 34-40.	0.3	12
160	A robust noise reduction technique for time resolved CT. Medical Physics, 2015, 43, 347-359.	3.0	11
161	Theoretical and experimental analysis of photon counting detector CT for proton stopping power prediction. Medical Physics, 2018, 45, 5186-5196.	3.0	11
162	Findings of CT-Derived Bone Strength Assessment in Inflammatory Bowel Disease Patients Undergoing CT Enterography in Clinical Practice. Inflammatory Bowel Diseases, 2019, 25, 1072-1079.	1.9	11

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163	Fat quantification of the rotator cuff musculature using dual-energy CT–A pilot study. European Journal of Radiology, 2020, 130, 109145.	2.6	11
164	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
165	Dual-source multi-energy CT with triple or quadruple x-ray beams. , 2016, 9783, .		10
166	Estimating a sizeâ€specific dose for helical head CT examinations using Monte Carlo simulation methods. Medical Physics, 2019, 46, 902-912.	3.0	10
167	The evolving role of imaging for small bowel neuroendocrine neoplasms: estimated impact of imaging and disease-free survival in a retrospective observational study. Abdominal Radiology, 2020, 45, 623-631.	2.1	10
168	Benefits of iterative metal artifact reduction and dual-energy CT towards mitigating artifact in the setting of total shoulder prostheses. Skeletal Radiology, 2021, 50, 51-58.	2.0	10
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