A three-dimensional statistical approach to improved image quality for multislice helical CT

DOI: 10.1118/1.2789499
Medical Physics, 2007, 34, 4526-44.

#	Paper	IF	Citations
747	Computational analysis and improvement of SIRT. **2008**, 27, 918-24		114
746	Nonlinear regularization of iterative weighted filtered backprojection for helical cone-beam CT. **2008**,		
745	Dose reduction for kilovotage cone-beam computed tomography in radiation therapy. *Physics in Medicine and Biology*, **2008**, 53, 2897-909	3.8	62
744	System modeling studies in iterative X-ray CT reconstruction. **2008**,		1
743	Iterative image reconstruction for CBCT using edge-preserving prior. *Medical Physics*, **2009**, 36, 252-60	4.4	119
742	Regularized iterative weighted filtered backprojection for helical cone-beam CT. *Medical Physics*, **2008**, 35, 4173-85	4.4	27
741	Spatial resolution enhancement in CT iterative reconstruction. **2009**,		3
740	Projection space denoising with bilateral filtering and CT noise modeling for dose reduction in CT. *Medical Physics*, **2009**, 36, 4911-9	4.4	172
739	Architecture-aware optimization targeting multithreaded stream computing. **2009**,		16
738	Quadratic regularization design for 2-D CT. **2009**, 28, 645-56		16
737	Options for reducing patient radiation dose with cardiovascular computed tomography. **2009**, 25, 153-164		8
736	Performance comparison between total variation (TV)-based compressed sensing and statistical iterative reconstruction algorithms. *Physics in Medicine and Biology*, **2009**, 54, 5781-804	3.8	209
735	Comparative study of two image space noise reduction methods for computed tomography: bilateral filter and nonlocal means. **2009**, 2009, 3529-32		17
734	CT of coronary artery disease. *Radiology*, **2009**, 253, 317-38	20.5	71
733	Radiation dose reduction in computed tomography: techniques and future perspective. **2009**, 1, 65-84		235
732	Multi GPU implementation of iterative tomographic reconstruction algorithms. **2009**,		18
731	Is iterative reconstruction ready for MDCT?. **2009**, 6, 274-6		50

730	Electronic noise modeling in statistical iterative reconstruction. **2009**, 18, 1228-38		58
729	Noniterative MAP reconstruction using sparse matrix representations. **2009**, 18, 2085-99		7
728	Accurate model-based high resolution cardiac image reconstruction in dual source CT. **2009**,		5
727	Cardiac CT: how much can temporal resolution, spatial resolution, and volume coverage be improved?. **2009**, 3, 143-52		26
726	High-definition multidetector computed tomography for evaluation of coronary artery stents: comparison to standard-definition 64-detector row computed tomography. **2009**, 3, 246-51		57
725	Recent technologic advances in multi-detector row cardiac CT. **2009**, 27, 655-64		16
724	Strategies for reducing radiation dose in CT. **2009**, 47, 27-40		557
723	Iterative reconstruction technique for reducing body radiation dose at CT: feasibility study. **2009**, 193, 764-71		583
722	Radiation dose reduction with chest computed tomography using adaptive statistical iterative reconstruction technique: initial experience. **2010**, 34, 40-5		157
721	Reducing abdominal CT radiation dose with adaptive statistical iterative reconstruction technique. **2010**, 45, 202-10		309
720	Pushing the envelope: new computed tomography techniques for cardiothoracic imaging. **2010**, 25, 100-11		39
719	Low-dose pulmonary CT angiography: reduced radiation exposure and iodine load at low tube kilovoltage. **2010**, 2, 695-705		
718	Appropriate patient selection at abdominal dual-energy CT using 80 kV: relationship between patient size, image noise, and image quality. *Radiology*, **2010**, 257, 732-42	20.5	126
717	A hybrid Kaczmarz□onjugate Gradient algorithm for image reconstruction. **2010**, 80, 2272-2285		8
716	Adaptive statistical iterative reconstruction for volume-rendered computed tomography portovenography: improvement of image quality. **2010**, 28, 700-6		12
715	3D forward and back-projection for X-ray CT using separable footprints. **2010**, 29, 1839-50		137
714	Recent technological and application developments in computed tomography and magnetic resonance imaging for improved pulmonary nodule detection and lung cancer staging. **2010**, 32, 1353-69		65
713	Comparing implementations of penalized weighted least-squares sinogram restoration. *Medical Physics*, **2010**, 37, 5929-38	4.4	6

712	Penalty weighting for statistical iterative CT reconstruction. **2010**,		1
711	Compressed sensing based cone-beam computed tomography reconstruction with a first-order method. *Medical Physics*, **2010**, 37, 5113-25	4.4	179
710	Block-based iterative coordinate descent. **2010**,		9
709	Optimization of the field-of-view in a modelbased iterative reconstruction for CT. **2010**,		
708	MEDICS. **2010**,		4
707	Reducing the radiation dose for CT colonography using adaptive statistical iterative reconstruction: A pilot study. **2010**, 195, 126-31		170
706	Radiation dose reduction at CT enterography: How low can we go while preserving diagnostic accuracy?. **2010**, 195, 76-7		26
705	Adaptive statistical iterative reconstruction technique for pulmonary CT: image quality of the cadaveric lung on standard- and reduced-dose CT. **2010**, 17, 1259-66		52
704	Cardiac computed tomography technology and dose-reduction strategies. **2010**, 48, 657-74		23
703	Predicting postoperative FEV1 using spiral computed tomography. **2010**, 17, 607-13		3
702	Assessment of acute antivascular effects of vandetanib with high-resolution dynamic contrast-enhanced computed tomographic imaging in a human colon tumor xenograft model in the nude rat. **2010**, 12, 697-707		19
701	Impact of new technologies on dose reduction in CT. *European Journal of Radiology*, **2010**, 76, 28-35	4.7	83
700	Noise Reduction in Dual-Energy Contrast Enhanced Digital Breast Tomosynthesis Using Regularization. *Lecture Notes in Computer Science*, **2010**, 92-99	0.9	2
699	Abdominal CT: comparison of low-dose CT with adaptive statistical iterative reconstruction and routine-dose CT with filtered back projection in 53 patients. **2010**, 195, 713-9		318
698	A variational approach for reconstructing low dose images in clinical helical CT. **2010**,		4
697	Integrative computed tomographic imaging of coronary artery disease. **2011**, 9, 27-43		3
696	Effects of the penalty on the penalized weighted least-squares image reconstruction for low-dose CBCT. *Physics in Medicine and Biology*, **2011**, 56, 5535-52	3.8	30
695	Iterative image reconstruction techniques: Applications for cardiac CT. **2011**, 5, 225-30		62

694	SCCT guidelines on radiation dose and dose-optimization strategies in cardiovascular CT. **2011**, 5, 198-224		372
693	New iterative reconstruction techniques for cardiovascular computed tomography: how do they work, and what are the advantages and disadvantages?. **2011**, 5, 286-92		135
692	Quantitative myocardial perfusion imaging using rapid kVp switch dual-energy CT: preliminary experience. **2011**, 5, 430-42		58
691	Quantitative myocardial CT perfusion: a pictorial review and the current state of technology development. **2011**, 5, 467-81		29
690	Impact of Adaptive Statistical Iterative Reconstruction (ASIR) on radiation dose and image quality in aortic dissection studies: a qualitative and quantitative analysis. **2011**, 196, W336-40		78
689	Initial performance characterization of a clinical noise-suppressing reconstruction algorithm for MDCT. **2011**, 197, 1404-9		131
688	Compressed sensing based 3D tomographic reconstruction for rotational angiography. *Lecture Notes in Computer Science*, **2011**, 14, 97-104	0.9	5
687	Optimization of radiation dose reduction in cardiac computed tomographic angiography. **2011**, 19, 163-76		17
686	Dose reduction in abdominal computed tomography: intraindividual comparison of image quality of full-dose standard and half-dose iterative reconstructions with dual-source computed tomography. **2011**, 46, 465-70		113
685	Noise-resolution tradeoffs in x-ray CT imaging: a comparison of penalized alternating minimization and filtered backprojection algorithms. *Medical Physics*, **2011**, 38, 1444-58	4.4	38
684	Stochastic formulation of patient positioning using linac-mounted cone beam imaging with prior knowledge. *Medical Physics*, **2011**, 38, 668-81	4.4	4
683	A strategy to decrease partial scan reconstruction artifacts in myocardial perfusion CT: phantom and in vivo evaluation. *Medical Physics*, **2012**, 39, 214-23	4.4	17
682	Coronary computed tomography--present status and future directions. **2011**, 65, 3-13		5
681	Fast model-based X-ray CT reconstruction using spatially nonhomogeneous ICD optimization. **2011**, 20, 161-75		206
680	Pilot multi-reader study demonstrating potential for dose reduction in dual energy hepatic CT using non-linear blending of mixed kV image datasets. **2011**, 21, 644-52		24
679	Chest computed tomography using iterative reconstruction vs filtered back projection (Part 1): Evaluation of image noise reduction in 32 patients. **2011**, 21, 627-35		157
678	Chest computed tomography using iterative reconstruction vs filtered back projection (Part 2): image quality of low-dose CT examinations in 80 patients. **2011**, 21, 636-43		195
677	Iterative reconstruction in image space (IRIS) in cardiac computed tomography: initial experience. **2011**, 27, 1081-7		120

676	Paediatric cardiac CT examinations: impact of the iterative reconstruction method ASIR on image quality--preliminary findings. **2011**, 41, 1154-64		59
675	Nonlinear three-dimensional noise filter with low-dose CT angiography: effect on the detection of small high-contrast objects in a phantom model. *Radiology*, **2011**, 258, 261-9	20.5	16
674	Approximations of noise covariance in multi-slice helical CT scans: impact on lung nodule size estimation. *Physics in Medicine and Biology*, **2011**, 56, 6223-42	3.8	11
673	Accelerated ordered-subsets algorithm based on separable quadratic surrogates for regularized image reconstruction in X-ray CT. **2011**,		3
672	Evaluation of heavily calcified vessels with coronary CT angiography: comparison of iterative and filtered back projection image reconstruction. *Radiology*, **2011**, 260, 390-9	20.5	136
671	Conventional and Newer Reconstruction Techniques in CT. **2011**, 143-156		
670	Maximum Likelihood CT reconstruction from material-decomposed sinograms using fisher information. **2011**,		3
669	An algorithm for total variation regularization in high-dimensional linear problems. **2011**, 27, 065002		59
668	Adaptive statistical iterative reconstruction technique for radiation dose reduction in chest CT: a pilot study. *Radiology*, **2011**, 259, 565-73	20.5	313
667	Managing radiation use in medical imaging: a multifaceted challenge. *Radiology*, **2011**, 258, 889-905	20.5	234
666	Image quality of multiplanar reconstruction of pulmonary CT scans using adaptive statistical iterative reconstruction. **2011**, 84, 335-41		27
665	Prior image constrained compressed sensing: implementation and performance evaluation. *Medical Physics*, **2012**, 39, 66-80	4.4	82
664	Reduced image noise at low-dose multidetector CT of the abdomen with prior image constrained compressed sensing algorithm. *Radiology*, **2011**, 260, 248-56	20.5	62
663	Nonconvex prior image constrained compressed sensing (NCPICCS): theory and simulations on perfusion CT. *Medical Physics*, **2011**, 38, 2157-67	4.4	55
662	Multi-Detector Row CTRecent Developments, Radiation Dose and Dose Reduction Technologies. **2012**, 3-19		2
661	Achieving routine submillisievert CT scanning: report from the summit on management of radiation dose in CT. *Radiology*, **2012**, 264, 567-80	20.5	205
660	Radiation dose reduction in temporal bone CT with iterative reconstruction technique. **2012**, 33, 1020-6		37
659	Improved image quality in dual-energy abdominal CT: comparison of iterative reconstruction in image space and filtered back projection reconstruction. **2012**, 199, 402-6		20

658	Noise reduction to decrease radiation dose and improve conspicuity of hepatic lesions at contrast-enhanced 80-kV hepatic CT using projection space denoising. **2012**, 198, 405-11		35
657	Fast variance computation for quadratically penalized iterative reconstruction of 3D axial CT images. **2012**,		3
656	Evaluation of convergence speed of a modified Nesterov gradient method for CT reconstruction. **2012**,		
655	Implicit priors for model-based inversion. **2012**,		5
654	Iterative reconstruction in head CT: image quality of routine and low-dose protocols in comparison with standard filtered back-projection. **2012**, 33, 218-24		100
653	Enhancement of spatial resolution in model-based iterative CT reconstruction by using sinogram preprocessing filters. **2012**,		
652	Dose assessment according to changes in algorithm in cardiac CT. **2012**, 167, 392-402		2
651	Ray-by-ray noise weighting in a Filtered Backprojection (FBP) algorithm. **2012**,		
650	Statistical X-ray CT reconstruction using a splitting-based iterative algorithm with orthonormal wavelets. **2012**,		5
649	Zipline: A fast update scheme for reconstruction with separable system models. **2012**,		
648	Iterative image reconstruction in helical cone-beam x-ray CT using a stored system matrix approach. *Physics in Medicine and Biology*, **2012**, 57, 3477-97	3.8	8
647	Coronary in-stent restenosis: assessment with CT coronary angiography. *Radiology*, **2012**, 265, 410-7	20.5	37
646	Model-based iterative reconstruction technique for ultralow-dose computed tomography of the lung: a pilot study. **2012**, 47, 482-9		117
645	High-definition computed tomography for coronary artery stents imaging compared with standard-definition 64-row multidectector computed tomography: an initial in vivo study. **2012**, 36, 295-300		13
644	Image quality improvement using an image-based noise reduction algorithm: initial experience in a phantom model for urinary stones. **2012**, 36, 610-5		5
643	Radiation dose reduction in abdominal computed tomography during the late hepatic arterial phase using a model-based iterative reconstruction algorithm: how low can we go?. **2012**, 47, 468-74		47
642	Development and validation of a practical lower-dose-simulation tool for optimizing computed tomography scan protocols. **2012**, 36, 477-87		75
641	Characterization of statistical prior image constrained compressed sensing. I. Applications to time-resolved contrast-enhanced CT. *Medical Physics*, **2012**, 39, 5930-48	4.4	21

640	[Novel method of noise power spectrum measurement for computed tomography images with adaptive iterative reconstruction method]. **2012**, 68, 1637-43		0
639	Model-based tomographic reconstruction of objects containing known components. **2012**, 31, 1837-48		51
638	Variability and accuracy of coronary CT angiography including use of iterative reconstruction algorithms for plaque burden assessment as compared with intravascular ultrasound-an ex vivo study. **2012**, 22, 2067-75		22
637	Low-dose CT of the lung: potential value of iterative reconstructions. **2012**, 22, 2597-606		117
636	Impact of iterative reconstruction on CNR and SNR in dynamic myocardial perfusion imaging in an animal model. **2012**, 22, 2654-61		56
635	CT artifacts: causes and reduction techniques. **2012**, 4, 229-240		414
634	. **2012**,		3
633	Feasibility and diagnostic accuracy of a low radiation exposure protocol for prospective ECG-triggering coronary MDCT angiography. **2012**, 67, 207-15		23
632	Reducing the radiation dose for low-dose CT of the paranasal sinuses using iterative reconstruction: feasibility and image quality. *European Journal of Radiology*, **2012**, 81, 2246-50	4.7	57
631	A review of patient dose and optimisation methods in adult and paediatric CT scanning. *European Journal of Radiology*, **2012**, 81, e665-83	4.7	122
630	Coronary artery plaques: cardiac CT with model-based and adaptive-statistical iterative reconstruction technique. *European Journal of Radiology*, **2012**, 81, e363-9	4.7	106
629	Radiation dose reduction with the adaptive statistical iterative reconstruction (ASIR) technique for chest CT in children: an intra-individual comparison. *European Journal of Radiology*, **2012**, 81, e938-43	4.7	37
628	Low-dose X-ray CT reconstruction via dictionary learning. **2012**, 31, 1682-97		362
627	AdaptiveIterative Dose Reduction in coronary CT angiography using 320-row CT: assessment of radiation dose reduction and image quality. **2012**, 6, 318-24		43
626	Dual-energy CT and its potential use for quantitative myocardial CT perfusion. **2012**, 6, 308-17		44
625	Prospectively ECG-triggered rapid kV-switching dual-energy CT for quantitative imaging of myocardial perfusion. **2012**, 5, 829-36		63
624	[Low dose cardiac computed tomography: how to obtain it?]. **2012**, 61, 357-64		3
623	Measurement of vascular wall attenuation: comparison of CT angiography using model-based iterative reconstruction with standard filtered back-projection algorithm CT in vitro. *European Journal of Radiology*, **2012**, 81, 3348-53	4.7	25

622	Current and Future Post-Processing and Reconstruction Methods for Improved Image Quality in Coronary Computed Tomographic Angiography. **2012**, 5, 360-366		
621	Towards task-based assessment of CT performance: system and object MTF across different reconstruction algorithms. *Medical Physics*, **2012**, 39, 4115-22	4.4	220
620	Forward-Projection Architecture for Fast Iterative Image Reconstruction in X-ray CT. **2012**, 60, 5508-5518		15
619	Compressed sensing algorithms for fan-beam computed tomography image reconstruction. **2012**, 51, 071402		3
618	Noise spatial nonuniformity and the impact of statistical image reconstruction in CT myocardial perfusion imaging. *Medical Physics*, **2012**, 39, 4079-92	4.4	11
617	Evaluation of robustness of maximum likelihood cone-beam CT reconstruction with total variation regularization. *Physics in Medicine and Biology*, **2012**, 57, 5955-70	3.8	14
616	Quantitative myocardial perfusion measurement using CT perfusion: a validation study in a porcine model of reperfused acute myocardial infarction. **2012**, 28, 1237-48		40
615	Non-invasive assessment of functionally relevant coronary artery stenoses with quantitative CT perfusion: preliminary clinical experiences. **2012**, 22, 39-50		51
614	CT image quality improvement using Adaptive Iterative Dose Reduction with wide-volume acquisition on 320-detector CT. **2012**, 22, 295-301		207
613	Impact of iterative reconstruction on image quality and radiation dose in multidetector CT of large body size adults. **2012**, 22, 1631-40		85
612	Model-based iterative reconstruction technique for radiation dose reduction in chest CT: comparison with the adaptive statistical iterative reconstruction technique. **2012**, 22, 1613-23		230
611	CT iterative reconstruction in image space: a phantom study. *Physica Medica*, **2012**, 28, 161-5	2.7	67
610	Iterative reconstruction methods in X-ray CT. *Physica Medica*, **2012**, 28, 94-108	2.7	445
609	A splitting-based iterative algorithm for accelerated statistical X-ray CT reconstruction. **2012**, 31, 677-88		162
608	Model-based iterative reconstruction in pediatric chest CT: assessment of image quality in a prospective study of children with cystic fibrosis. **2013**, 43, 558-67		67
607	An algebraic iterative reconstruction technique for differential X-ray phase-contrast computed tomography. **2013**, 23, 186-93		18
606	Iterative reconstruction techniques for computed tomography Part 1: technical principles. **2013**, 23, 1623-31		284
605	A novel scheme to design the filter for CT reconstruction using FBP algorithm. **2013**, 12, 50		8

604	Iterative Reconstruction Techniques: What do they Mean for Cardiac CT?. **2013**, 6, 268-281		17
603	Dose reduction methods for CT colonography. **2013**, 38, 224-32		28
602	Clinical impact of an adaptive statistical iterative reconstruction algorithm for detection of hypervascular liver tumours using a low tube voltage, high tube current MDCT technique. **2013**, 23, 3325-35		30
601	Model-based iterative reconstruction for reduction of radiation dose in abdominopelvic CT: comparison to adaptive statistical iterative reconstruction. **2013**, 2, 209		60
600	Recent Advances in CT Image Reconstruction. *Current Radiology Reports*, **2013**, 1, 39-51	0.5	77
599	Prediction and reduction of motion artifacts in free-breathing dynamic contrast enhanced CT perfusion imaging of primary and metastatic intrahepatic tumors. **2013**, 20, 414-22		13
598	CT volumetry of artificial pulmonary nodules using an ex vivo lung phantom: influence of exposure parameters and iterative reconstruction on reproducibility. *European Journal of Radiology*, **2013**, 82, 1577-83	4.7	21
597	Radiation dose reduction in soft tissue neck CT using adaptive statistical iterative reconstruction (ASIR). *European Journal of Radiology*, **2013**, 82, 2222-6	4.7	25
596	CT of the chest with model-based, fully iterative reconstruction: comparison with adaptive statistical iterative reconstruction. **2013**, 13, 27		51
595	Image quality and radiation exposure in CT of the pancreas: 320-MDCT with and without adaptive iterative dose reduction versus 64-MDCT. **2013**, 68, e593-600		7
594	The effect of iterative image reconstruction algorithms on the feasibility of automated plaque assessment in coronary CT angiography. **2013**, 29, 1879-88		13
593	Improving abdomen tumor low-dose CT images using a fast dictionary learning based processing. *Physics in Medicine and Biology*, **2013**, 58, 5803-20	3.8	114
592	The feasibility of an inverse geometry CT system with stationary source arrays. *Medical Physics*, **2013**, 40, 031904	4.4	12
591	Comparison of numerical convergence speeds of convergent and accelerated algorithms for penalized likelihood PET image. **2013**,		1
590	Model-based Iterative Reconstruction and Adaptive Statistical Iterative Reconstruction Techniques in Abdominal CT: Comparison of Image Quality in the Detection of Colorectal Liver Metastases. *Radiology*, **2013**, 269, 469-474	20.5	82
589	Accelerating ordered subsets image reconstruction for X-ray CT using spatially nonuniform optimization transfer. **2013**, 32, 1965-78		34
588	Comparative assessment of three image reconstruction techniques for image quality and radiation dose in patients undergoing abdominopelvic multidetector CT examinations. **2013**, 86, 20120161		20
587	CT evaluation of coronary artery stents with iterative image reconstruction: improvements in image quality and potential for radiation dose reduction. **2013**, 23, 125-32		80

586	[State of the art and future trends in technology for computed tomography dose reduction]. **2013**, 55 Suppl 2, 9-16		3
585	Sinogram affirmed iterative reconstruction in head CT: improvement of objective and subjective image quality with concomitant radiation dose reduction. *European Journal of Radiology*, **2013**, 82, 1431-7	4.7	41
584	Stent evaluation in low-dose coronary CT angiography: effect of different iterative reconstruction settings. **2013**, 7, 319-25		15
583	Precision of iodine quantification in hepatic CT: effects of iterative reconstruction with various imaging parameters. **2013**, 200, W475-82		17
582	Comparison of pure and hybrid iterative reconstruction techniques with conventional filtered back projection: image quality assessment in the cervicothoracic region. *European Journal of Radiology*, **2013**, 82, 356-60	4.7	41
581	Perspectives on radiation dose in abdominal imaging. **2013**, 38, 1190-6		7
580	Raw-data-based iterative reconstruction versus filtered back projection: image quality of low-dose chest computed tomography examinations in 87 patients. **2013**, 37, 1024-32		24
579	Modelling the physics in the iterative reconstruction for transmission computed tomography. *Physics in Medicine and Biology*, **2013**, 58, R63-96	3.8	130
578	Adaptive Compressed Tomography Sensing. **2013**,		5
577	Adaptive nonlocal means filtering based on local noise level for CT denoising. *Medical Physics*, **2014**, 41, 011908	4.4	132
576	Statistical reconstruction of material decomposed data in spectral CT. **2013**, 32, 1249-57		52
575	Vascular diameter measurement in CT angiography: comparison of model-based iterative reconstruction and standard filtered back projection algorithms in vitro. **2013**, 200, 652-7		23
574	Reducing radiation dose at CT colonography: decreasing tube voltage to 100 kVp. *Radiology*, **2013**, 266, 791-800	20.5	39
573	Improved delineation of the anterior spinal artery with model-based iterative reconstruction in CT angiography: a clinical pilot study. **2013**, 200, 442-6		25
572	Filtered back projection, adaptive statistical iterative reconstruction, and a model-based iterative reconstruction in abdominal CT: an experimental clinical study. *Radiology*, **2013**, 266, 197-206	20.5	196
571	Volumetric quantification of lung nodules in CT with iterative reconstruction (ASiR and MBIR). *Medical Physics*, **2013**, 40, 111902	4.4	45
570	Model-based iterative reconstruction versus adaptive statistical iterative reconstruction and filtered back projection in liver 64-MDCT: focal lesion detection, lesion conspicuity, and image noise. **2013**, 200, 1071-6		64
569	Evaluation of strategies to reduce radiation dose in perfusion CT imaging using a reproducible biologic phantom. **2013**, 200, W621-7		9

568	A filtered backprojection algorithm with ray-by-ray noise weighting. *Medical Physics*, **2013**, 40, 031113	4.4	22
567	Noise-reducing algorithms do not necessarily provide superior dose optimisation for hepatic lesion detection with multidetector CT. **2013**, 86, 20120500		20
566	Evaluation of algebraic iterative image reconstruction methods for tetrahedron beam computed tomography systems. **2013**, 2013, 609704		1
565	Dose reduction in oncological staging multidetector CT: effect of iterative reconstruction. **2013**, 86, 20120224		27
564	Improved delineation of arteries in the posterior fossa of the brain by model-based iterative reconstruction in volume-rendered 3D CT angiography. **2013**, 34, 971-5		31
563	Iterative image reconstruction: a realistic dose-saving method in cardiac CT imaging?. **2013**, 11, 403-9		22
562	DQS advisor: a visual interface and knowledge-based system to balance dose, quality, and reconstruction speed in iterative CT reconstruction with application to NLM-regularization. *Physics in Medicine and Biology*, **2013**, 58, 7857-73	3.8	8
561	PIRPLE: a penalized-likelihood framework for incorporation of prior images in CT reconstruction. *Physics in Medicine and Biology*, **2013**, 58, 7563-82	3.8	40
560	Assessment of a model-based, iterative reconstruction algorithm (MBIR) regarding image quality and dose reduction in liver computed tomography. **2013**, 48, 598-606		109
559	An edge-preserving total variation denoising method for DECT image. **2013**,		1
558	Evaluation of image quality and radiation dose by adaptive statistical iterative reconstruction technique level for chest CT examination. **2013**, 157, 163-71		4
557	Automatic selection of tube potential for radiation dose reduction in vascular and contrast-enhanced abdominopelvic CT. **2013**, 201, W297-306		49
556	A model based iterative reconstruction algorithm for high angle annular dark field-scanning transmission electron microscope (HAADF-STEM) tomography. **2013**, 22, 4532-44		56
555	Ordered subsets with momentum for accelerated X-ray CT image reconstruction. **2013**,		3
554	Modeling and estimation of detector response and focal spot profile for high-resolution iterative CT reconstruction. **2013**,		
553	Innovative data weighting for iterative reconstruction in a helical CT security baggage scanner. **2013**,		6
552	Quadratic regularization design for 3D axial CT: Towards isotropic noise. **2013**,		
551	A method for simultaneous image reconstruction and beam hardening correction. **2013**,		

550	Ordered subsets acceleration using relaxed momentum for X-ray CT image reconstruction. **2013**,		0
549	Low dose CT image restoration using a localized patch database. **2013**,		1
548	Gaussian mixture Markov random field for image denoising and reconstruction. **2013**,		9
547	Plug-and-Play priors for model based reconstruction. **2013**,		321
546	A methodology for image quality evaluation of advanced CT systems. *Medical Physics*, **2013**, 40, 031908	4.4	75
545	Model-based iterative reconstruction technique for ultralow-dose chest CT: comparison of pulmonary nodule detectability with the adaptive statistical iterative reconstruction technique. **2013**, 48, 206-12		129
544	Adaptive statistical iterative reconstruction algorithm for measurement of vascular diameter on computed tomographic angiography in vitro. **2013**, 37, 311-6		3
543	Characterization of statistical prior image constrained compressed sensing (PICCS): II. Application to dose reduction. *Medical Physics*, **2013**, 40, 021902	4.4	46
542	Iterative image reconstruction for sparse-view CT using normal-dose image induced total variation prior. *PLoS ONE*, **2013**, 8, e79709	3.7	43
541	Validation of a low dose simulation technique for computed tomography images. *PLoS ONE*, **2014**, 9, e107843	3.7	21
540	Adaptive iterative dose reduction algorithm in CT: effect on image quality compared with filtered back projection in body phantoms of different sizes. **2014**, 15, 195-204		29
539	Fundamentals of CT Reconstruction in 2D and 3D. **2014**, 263-295		9
538	dPIRPLE: a joint estimation framework for deformable registration and penalized-likelihood CT image reconstruction using prior images. *Physics in Medicine and Biology*, **2014**, 59, 4799-826	3.8	35
537	Planar strain analysis of liver undergoing microwave thermal ablation using x-ray CT. *Medical Physics*, **2015**, 42, 372-80	4.4	11
536	Assessment of the dose reduction potential of a model-based iterative reconstruction algorithm using a task-based performance metrology. *Medical Physics*, **2015**, 42, 314-23	4.4	109
535	An experimental study on the noise correlation properties of CBCT projection data. **2014**,		
534	Statistical x-ray computed tomography imaging from photon-starved measurements. **2014**,		9
533	Model-based iterative tomographic reconstruction with adaptive sparsifying transforms. **2014**,		2

532	Generalized Least-Squares CT Reconstruction with Detector Blur and Correlated Noise Models. **2014**, 9033, 903335		7
531	Evaluation of an iterative model-based reconstruction algorithm for low-tube-voltage (80 kVp) computed tomography angiography. *Journal of Medical Imaging*, **2014**, 1, 033501	2.6	14
530	Repeated head CT in the neurosurgical intensive care unit: feasibility of sinogram-affirmed iterative reconstruction-based ultra-low-dose CT for surveillance. **2014**, 35, 1281-7		7
529	Regularization Design and Control of Change Admission in Prior-Image-based Reconstruction. **2014** , 9033,		3
528	Two-step iterative reconstruction of region-of-interest with truncated projection in computed tomography. **2014**,		
527	Iterative raw measurements restoration method with penalized weighted least squares approach for low-dose CT. **2014**,		
526	Pre-computed backprojection based penalized-likelihood (PPL) reconstruction with an edge-preserved regularizer for stationary Digital Breast Tomosynthesis. **2014**,		1
525	Low-dose CT reconstruction with patch based sparsity and similarity constraints. **2014**,		
524	Impact of redundant ray weighting on motion artifact in a statistical iterative reconstruction framework. **2014**,		
523	Characterization of a commercial hybrid iterative and model-based reconstruction algorithm in radiation oncology. *Medical Physics*, **2014**, 41, 081907	4.4	10
522	Control algorithms for dynamic attenuators. *Medical Physics*, **2014**, 41, 061907	4.4	7
521	Combined iterative reconstruction and image-domain decomposition for dual energy CT using total-variation regularization. *Medical Physics*, **2014**, 41, 051909	4.4	44
520	Standard and reduced radiation dose liver CT images: adaptive statistical iterative reconstruction versus model-based iterative reconstruction-comparison of findings and image quality. *Radiology*, **2014**, 273, 793-800	20.5	49
519	How I do it: managing radiation dose in CT. *Radiology*, **2014**, 273, 657-72	20.5	119
518	Model-based iterative reconstruction for multi-detector row CT assessment of the Adamkiewicz artery. *Radiology*, **2014**, 270, 282-91	20.5	30
517	Statistical model based iterative reconstruction (MBIR) in clinical CT systems: experimental assessment of noise performance. *Medical Physics*, **2014**, 41, 041906	4.4	72
516	A low-complexity 2-point step size gradient projection method with selective function evaluations for smoothed total variation based CBCT reconstructions. *Physics in Medicine and Biology*, **2014**, 59, 6565-82	3.8	8
515	Dose reduction using a dynamic, piecewise-linear attenuator. *Medical Physics*, **2014**, 41, 021910	4.4	17

514	Methods for clinical evaluation of noise reduction techniques in abdominopelvic CT. **2014**, 34, 849-62		90
513	256-MDCT for evaluation of urolithiasis: iterative reconstruction allows for a significant reduction of the applied radiation dose while maintaining high subjective and objective image quality. **2014**, 58, 283-90		12
512	Deriving adaptive MRF coefficients from previous normal-dose CT scan for low-dose image reconstruction via penalized weighted least-squares minimization. *Medical Physics*, **2014**, 41, 041916	4.4	33
511	Model-based iterative reconstruction for synchrotron X-ray tomography. **2014**,		19
510	Alpha image reconstruction (AIR): a new iterative CT image reconstruction approach using voxel-wise alpha blending. *Medical Physics*, **2014**, 41, 061914	4.4	4
509	Computed tomography: revolutionizing the practice of medicine for 40 years. *Radiology*, **2014**, 273, S45-74	14.5	88
508	Iterative image-domain decomposition for dual-energy CT. *Medical Physics*, **2014**, 41, 041901	4.4	79
507	Low dose dynamic CT myocardial perfusion imaging using a statistical iterative reconstruction method. *Medical Physics*, **2014**, 41, 071914	4.4	18
506	Statistical model based iterative reconstruction (MBIR) in clinical CT systems. Part II. Experimental assessment of spatial resolution performance. *Medical Physics*, **2014**, 41, 071911	4.4	63
505	Noise correlation in CBCT projection data and its application for noise reduction in low-dose CBCT. *Medical Physics*, **2014**, 41, 031906	4.4	31
504	Effects of ray profile modeling on resolution recovery in clinical CT. *Medical Physics*, **2014**, 41, 021907	4.4	13
503	Sinogram rebinning and frequency boosting for high resolution iterative CT reconstruction with focal spot deflection. **2014**,		1
502	A new approach to regularized iterative CT image reconstruction. **2014**,		1
501	Ultralow-dose chest computed tomography for pulmonary nodule detection: first performance evaluation of single energy scanning with spectral shaping. **2014**, 49, 465-73		162
500	Role of CT angiography for detection of coronary atherosclerosis. **2014**, 12, 373-82		2
499	Iterative reconstruction: how it works, how to apply it. **2014**, 44 Suppl 3, 431-9		12
498	Simultaneous assessment of airway instability and respiratory dynamics with low-dose 4D-CT in chronic obstructive pulmonary disease: a technical note. **2014**, 87, 294-300		24
497	Highly cited papers in Medical Physics. *Medical Physics*, **2014**, 41, 080401	4.4	5

496	Nonlocal means-based regularizations for statistical CT reconstruction. **2014**,		4
495	Pushing CT and MR imaging to the molecular level for studying the "omics": current challenges and advancements. **2014**, 2014, 365812		5
494	Update on the non-prewhitening model observer in computed tomography for the´assessment of the adaptive statistical´and model-based iterative reconstruction algorithms. *Physics in Medicine and Biology*, **2014**, 59, 4047-64	3.8	42
493	Noise performance of statistical model based iterative reconstruction in clinical CT systems. **2014**,		1
492	Comparison of the effect of iterative reconstruction versus filtered back projection on cardiac CT postprocessing. **2014**, 21, 318-24		16
491	Noise properties of reconstructed images in a kilo-voltage on-board imaging system with iterative reconstruction techniques: a phantom study. *Physica Medica*, **2014**, 30, 365-73	2.7	6
490	Statistical image reconstruction for low-dose CT using nonlocal means-based regularization. **2014**, 38, 423-35		51
489	Model-based iterative reconstruction compared to adaptive statistical iterative reconstruction and filtered back-projection in CT of the kidneys and the adjacent retroperitoneum. **2014**, 21, 774-84		19
488	Recent and future directions in CT imaging. **2014**, 42, 260-8		61
487	Emergency CT head and neck imaging: effects of swimmer‚ position on dose and image quality. **2014**, 24, 969-79		7
486	CT of the pancreas: comparison of image quality and pancreatic duct depiction among model-based iterative, adaptive statistical iterative, and filtered back projection reconstruction techniques. **2014** , 39, 497-505		8
485	Adaptive statistical iterative reconstruction: reducing dose while preserving image quality in the pediatric head CT examination. **2014**, 44, 997-1003		25
484	Sparsity-regularized image reconstruction of decomposed K-edge data in spectral CT. *Physics in Medicine and Biology*, **2014**, 59, N65-79	3.8	27
483	Investigation of iterative image reconstruction in low-dose breast CT. *Physics in Medicine and Biology*, **2014**, 59, 2659-85	3.8	40
482	A Fourier-based compressed sensing technique for accelerated CT image reconstruction using first-order methods. *Physics in Medicine and Biology*, **2014**, 59, 3097-119	3.8	10
481	Patient radiation exposure and image quality evaluation with the use of iDose4 iterative reconstruction algorithm in chest-abdomen-pelvis CT examinations. **2014**, 158, 399-405		12
480	Model-Based Iterative Reconstruction for Dual-Energy X-Ray CT Using a Joint Quadratic Likelihood Model. **2014**, 33, 117-34		73
479	Artifact suppressed dictionary learning for low-dose CT image processing. **2014**, 33, 2271-92		226

478	High energy x-ray phase contrast CT using glancing-angle grating interferometers. *Medical Physics*, **2014**, 41, 021904	4.4	20
477	CT angiography after carotid artery stenting: assessment of the utility of adaptive statistical iterative reconstruction and model-based iterative reconstruction. **2014**, 56, 947-53		3
476	Exploring the Complementary Role of CAC and Coronary CT in the Primary CVD Prevention Setting. **2014**, 8, 1		1
475	Quantifying the Importance of the Statistical Assumption in Statistical X-ray CT Image Reconstruction. **2014**, 33, 61-73		12
474	Diameter measurement of vascular model on CT angiography using model-based iterative reconstruction: effect of tube current on accuracy. **2014**, 202, 437-42		4
473	. **2014**,		1
472	Ultra-low-dose computed tomographic angiography with model-based iterative reconstruction compared with standard-dose imaging after endovascular aneurysm repair: a prospective pilot study. **2014**, 39, 1297-303		4
471	Influence of iterative image reconstruction on CT-based calcium score measurements. **2014**, 30, 961-7		32
470	Dose reduction in whole-body computed tomography of multiple injuries (DoReMI): protocol for a prospective cohort study. **2014**, 22, 15		9
469	Adaptive statistical iterative reconstruction and bismuth shielding for evaluation of dose reduction to the eye and image quality during head CT. **2014**, 64, 923-928		2
468	Dual-energy cone-beam CT with a flat-panel detector: effect of reconstruction algorithm on material classification. *Medical Physics*, **2014**, 41, 021908	4.4	23
467	Coronary artery disease: diagnostic accuracy of CT coronary angiography--a comparison of high and standard spatial resolution scanning. *Radiology*, **2014**, 271, 688-94	20.5	59
466	Radiation dose reduction with dictionary learning based processing for head CT. **2014**, 37, 483-93		5
465	Scanner abdomino-pelvien dose standard versus basse-dose : comparaison entre r troprojection filtr e et Adaptive Iterative Dose Reduction 3D. **2014**, 95, 51-58		1
464	Model-based Iterative Reconstruction: A Promising Algorithm for Today Computed Tomography Imaging. **2014**, 45, 131-136		46
463	Standard dose versus low-dose abdominal and pelvic CT: comparison between filtered back projection versus adaptive iterative dose reduction 3D. **2014**, 95, 47-53		51
462	Techniques and tactics for optimizing CT dose in adults and children: state of the art and future advances. **2014**, 11, 262-6		25
461	Correlation between human and model observer performance for discrimination task in CT. *Physics in Medicine and Biology*, **2014**, 59, 3389-404	3.8	35

460	Emerging techniques for dose optimization in abdominal CT. **2014**, 34, 4-17		54
459	Low-dose CT with automatic tube current modulation, adaptive statistical iterative reconstruction, and low tube voltage for the diagnosis of renal colic: impact of body mass index. **2014**, 202, 553-60		40
458	Evaluation of low-dose CT angiography with model-based iterative reconstruction after endovascular aneurysm repair of a thoracic or abdominal aortic aneurysm. **2014**, 202, 648-55		29
457	Ultra-low-dose CT of the lung: effect of iterative reconstruction techniques on image quality. **2014**, 21, 695-703		37
456	Optimizing craniofacial CT technique. **2014**, 24, 395-405, vii		3
455	Comparison of iterative model-based reconstruction versus conventional filtered back projection and hybrid iterative reconstruction techniques: lesion conspicuity and influence of body size in anthropomorphic liver phantoms. **2014**, 38, 859-68		21
454	Initial performance evaluation of iterative model reconstruction in abdominal computed tomography. **2014**, 38, 408-14		18
453	Liver computed tomography with low tube voltage and model-based iterative reconstruction algorithm for hepatic vessel evaluation in living liver donor candidates. **2014**, 38, 367-75		13
452	Novel iterative reconstruction method for optimal dose usage in redundant CT - acquisitions. **2014**,		1
451	FINESSE: a Fast Iterative Non-linear Exact Sub-space SEarch based algorithm for CT imaging. **2014**,		
450	Comparison between pre-log and post-log statistical models in low-dose CT iterative reconstruction. **2014**,		1
449	Successful suppression of cone beam artifacts using iterative reconstruction algorithm. **2014**,		1
448	Coronary computed tomography angiography with model-based iterative reconstruction using a radiation exposure similar to chest X-ray examination. **2014**, 35, 1131-6		80
447	Acquiring tomographic images from panoramic X-ray scanners. **2014**,		
446	Computed tomography radiation dose reduction: effect of different iterative reconstruction algorithms on image quality. **2014**, 38, 815-23		28
445	Toward a dose reduction strategy using model-based reconstruction with limited-angle tomosynthesis. **2014**,		2
444	Dose, noise and view weights in CT helical scans. **2014**,		
443	Synchronized multiartifact reduction with tomographic reconstruction (SMART-RECON): A statistical model based iterative image reconstruction method to eliminate limited-view artifacts and to mitigate the temporal-average artifacts in time-resolved CT. *Medical Physics*, **2015**, 42, 4698-707	4.4	31

442	Influence of radiation dose and reconstruction algorithm in MDCT assessment of airway wall thickness: A phantom study. *Medical Physics*, **2015**, 42, 5919-27	4.4	7
441	The Three-Dimensional Morphology of Growing Dendrites. **2015**, 5, 11824		76
440	Sinogram restoration in computed tomography with an edge-preserving penalty. *Medical Physics*, **2015**, 42, 1307-20	4.4	7
439	Gaussian mixture prior models for imaging of flow cross sections from sparse hyperspectral measurements. **2015**,		2
438	Effects of model-based iterative reconstruction on image quality for low-dose computed tomographic angiography of the thoracic aorta in a Swine model. **2015**, 39, 196-201		4
437	Evolution in Computed Tomography: The Battle for Speed and Dose. **2015**, 50, 629-44		95
436	Electron Tomography: A Three-Dimensional Analytic Tool for Hard and Soft Materials Research. **2015**, 27, 5638-63		109
435	Ultra-low dose CT attenuation correction for PET/CT: analysis of sparse view data acquisition and reconstruction algorithms. *Physics in Medicine and Biology*, **2015**, 60, 7437-60	3.8	11
434	Assessment of Low-Contrast Resolution for the American College of Radiology Computed Tomographic Accreditation Program: What Is the Impact of Iterative Reconstruction?. **2015**, 39, 619-23		10
433	Ultralow-Dose Abdominal Computed Tomography: Comparison of 2 Iterative Reconstruction Techniques in a Prospective Clinical Study. **2015**, 39, 489-98		12
432	The comparison of high and standard definition computed tomography techniques regarding coronary artery imaging. **2015**, 15, 925-30		2
431	Feasibility Study of Radiation Dose Reduction in Adult Female Pelvic CT Scan with Low Tube-Voltage and Adaptive Statistical Iterative Reconstruction. **2015**, 16, 1047-55		7
430	3D algebraic iterative reconstruction for cone-beam x-ray differential phase-contrast computed tomography. *PLoS ONE*, **2015**, 10, e0117502	3.7	12
429	A Novel Iterative CT Reconstruction Approach Based on FBP Algorithm. *PLoS ONE*, **2015**, 10, e0138498	3.7	9
428	Accelerated Compressed Sensing Based CT Image Reconstruction. **2015**, 2015, 161797		12
427	Impact of model-based iterative reconstruction on image quality of contrast-enhanced neck CT. **2015**, 36, 391-6		17
426	Regularization designs for uniform spatial resolution and noise properties in statistical image reconstruction for 3-D X-ray CT. **2015**, 34, 678-89		30
425	Limiting CT radiation dose in children with craniosynostosis: phantom study using model-based iterative reconstruction. **2015**, 45, 1544-53		23

424	New Approaches to Reduce Radiation While Maintaining Image Quality in Multi-Detector-Computed Tomography. *Current Radiology Reports*, **2015**, 3, 1	0.5	3
423	Temporal Bone CT: Improved Image Quality and Potential for Decreased Radiation Dose Using an Ultra-High-Resolution Scan Mode with an Iterative Reconstruction Algorithm. **2015**, 36, 1599-603		25
422	Approximate path seeking for statistical iterative reconstruction. **2015**,		1
421	Diagnostic Performance of an Advanced Modeled Iterative Reconstruction Algorithm for Low-Contrast Detectability with a Third-Generation Dual-Source Multidetector CT Scanner: Potential for Radiation Dose Reduction in a Multireader Study. *Radiology*, **2015**, 275, 735-45	20.5	115
420	Clinical image benefits after model-based reconstruction for low dose dedicated breast tomosynthesis. **2015**,		
419	4D model-based iterative reconstruction from interlaced views. **2015**,		4
418	. **2015**, 1, 200-216		113
417	Reduced z-axis technique for CT Pulmonary angiography in pregnancy--validation for practical use and dose reduction. **2015**, 22, 651-6		11
416	Distance driven back projection image reconstruction in digital tomosysthesis. **2015**,		
415	Advanced prior modeling for 3D bright field electron tomography. **2015**,		1
414	Alternating dual updates algorithm for X-ray CT reconstruction on the GPU. **2015**, 1, 186-199		18
413	Modelling the channel-wise count response of a photon-counting spectral CT detector to a broad x-ray spectrum. **2015**,		
412	Anthropomorphic model observer performance in three-dimensional detection task for low-contrast computed tomography. *Journal of Medical Imaging*, **2016**, 3, 011009	2.6	13
411	Rotationally-invariant non-local means for image denoising and tomography. **2015**,		1
410	Novel iterative reconstruction method with optimal dose usage for partially redundant CT-acquisition. *Physics in Medicine and Biology*, **2015**, 60, 8567-82	3.8	5
409	Prospective regularization design in prior-image-based reconstruction. *Physics in Medicine and Biology*, **2015**, 60, 9515-36	3.8	12
408	Joint metal artifact reduction and segmentation of CT images using dictionary-based image prior and continuous-relaxed potts model. **2015**,		8
407	Iterative CBCT reconstruction using Hessian penalty. *Physics in Medicine and Biology*, **2015**, 60, 1965-87	3.8	28

406	High-fidelity artifact correction for cone-beam CT imaging of the brain. *Physics in Medicine and Biology*, **2015**, 60, 1415-39	3.8	54
405	Fast X-ray CT image reconstruction using a linearized augmented Lagrangian method with ordered subsets. **2015**, 34, 388-99		33
404	Reducing the radiation dose for computed tomography colonography using model-based iterative reconstruction. **2015**, 40, 1183-9		8
403	Image quality of iterative reconstruction in cranial CT imaging: comparison of model-based iterative reconstruction (MBIR) and adaptive statistical iterative reconstruction (ASiR). **2015**, 25, 140-6		26
402	Modulation transfer function measurement of CT images by use of a circular edge method with a logistic curve-fitting technique. **2015**, 8, 53-9		20
401	Edge-preserving image denoising via group coordinate descent on the GPU. **2015**, 24, 1273-81		11
400	Computed tomographic assessment of coronary artery disease: state-of-the-art imaging techniques. **2015**, 53, 271-85		30
399	Combining ordered subsets and momentum for accelerated X-ray CT image reconstruction. **2015**, 34, 167-78		94
398	Image quality of CT angiography with model-based iterative reconstruction in young children with congenital heart disease: comparison with filtered back projection and adaptive statistical iterative reconstruction. **2015**, 31 Suppl 1, 31-8		10
397	Current and Novel Imaging Techniques in Coronary CT. **2015**, 35, 991-1010		67
396	CT colonography at low tube potential: using iterative reconstruction to decrease noise. **2015**, 70, 981-8		5
395	Model-Based Iterative Reconstruction for Bright-Field Electron Tomography. **2015**, 1, 1-15		26
394	Construction of Realistic Liver Phantoms from Patient Images using 3D Printer and Its Application in CT Image Quality Assessment. **2015**, 2015,		6
393	Improving pulmonary vessel image quality with a full model-based iterative reconstruction algorithm in 80kVp low-dose chest CT for pediatric patients aged 0-6 years. *Acta Radiologica*, **2015**, 56, 761-8	2	17
392	Potential of combining iterative reconstruction with noise efficient detector design: aggressive dose reduction in head CT. **2015**, 88, 20140404		7
391	CT Dose Reduction for Visceral Adipose Tissue Measurement: Effects of Model-Based and Adaptive Statistical Iterative Reconstructions and Filtered Back Projection. **2015**, 204, W677-83		7
390	Median prior constrained TV algorithm for sparse view low-dose CT reconstruction. **2015**, 60, 117-31		44
389	Statistical image reconstruction for low-dose CT using nonlocal means-based regularization. Part II: An adaptive approach. **2015**, 43, 26-35		31

388	Use of ionizing radiation in screening examinations for coronary artery calcium and cancers of the lung, colon, and breast. **2015**, 50, 148-60		4
387	Computer-aided detection of artificial pulmonary nodules using an ex vivo lung phantom: influence of exposure parameters and iterative reconstruction. *European Journal of Radiology*, **2015**, 84, 1005-11	4.7	23
386	Effect of radiologistsQexperience with an adaptive statistical iterative reconstruction algorithm on detection of hypervascular liver lesions and perception of image quality. **2015**, 40, 2850-60		2
385	Use of Model-Based Iterative Reconstruction (MBIR) in reduced-dose CT for routine follow-up of patients with malignant lymphoma: dose savings, image quality and phantom study. **2015**, 25, 2362-70		32
384	Model-based iterative reconstruction for detection of subtle hypoattenuation in early cerebral infarction: a phantom study. **2015**, 33, 26-32		17
383	Task-based image quality evaluation of iterative reconstruction methods for low dose CT using computer simulations. *Physics in Medicine and Biology*, **2015**, 60, 2881-901	3.8	12
382	Very low-dose (0.15 mGy) chest CT protocols using the COPDGene 2 test object and a third-generation dual-source CT scanner with corresponding third-generation iterative reconstruction software. **2015**, 50, 40-5		80
381	Bayesian approach to time-resolved tomography. **2015**, 23, 20062-74		8
380	Radiation Dose Reduction in Pediatric Body CT Using Iterative Reconstruction and a Novel Image-Based Denoising Method. **2015**, 205, 1026-37		16
379	Image quality in CT: From physical measurements to model observers. *Physica Medica*, **2015**, 31, 823-843	2.7	120
378	Statistical reconstruction for cone-beam CT with a post-artifact-correction noise model: application to high-quality head imaging. *Physics in Medicine and Biology*, **2015**, 60, 6153-75	3.8	32
377	TIMBIR: A Method for Time-Space Reconstruction From Interlaced Views. **2015**, 1, 96-111		60
376	Technical Note: Measuring contrast- and noise-dependent spatial resolution of an iterative reconstruction method in CT using ensemble averaging. *Medical Physics*, **2015**, 42, 2261-7	4.4	45
375	State of the Art: Iterative CT Reconstruction Techniques. *Radiology*, **2015**, 276, 339-57	20.5	348
374	Knowledge-based iterative model reconstruction (IMR) algorithm in ultralow-dose CT for evaluation of urolithiasis: evaluation of radiation dose reduction, image quality, and diagnostic performance. **2015**, 40, 3137-46		25
373	Statistical model based iterative reconstruction in clinical CT systems. Part III. Task-based kV/mAs optimization for radiation dose reduction. *Medical Physics*, **2015**, 42, 5209-21	4.4	8
372	Turn down the noise--a blinded evaluation of iterative image reconstruction in radiation therapy computed tomography simulation. **2015**, 5, e393-400		1
371	Compressed-sensing-based content-driven hierarchical reconstruction: Theory and application to C-arm cone-beam tomography. *Medical Physics*, **2015**, 42, 5222-37	4.4	7

370	Evidence of dose saving in routine CT practice using iterative reconstruction derived from a national diagnostic reference level survey. **2015**, 88, 20150380		8
369	Statistical iterative reconstruction to improve image quality for digital breast tomosynthesis. *Medical Physics*, **2015**, 42, 5377-90	4.4	11
368	[Coronary stent evaluation with cardiac CT: Literature review]. **2015**, 64, 362-7		1
367	Degradation of CT Low-Contrast Spatial Resolution Due to the Use of Iterative Reconstruction and Reduced Dose Levels. *Radiology*, **2015**, 276, 499-506	20.5	86
366	Ultra-low dose abdominal MDCT: using a knowledge-based Iterative Model Reconstruction technique for substantial dose reduction in a prospective clinical study. *European Journal of Radiology*, **2015**, 84, 2-10	4.7	38
365	Comparison of cardiac computed tomography versus cardiac magnetic resonance for characterization of left atrium anatomy before radiofrequency catheter ablation of atrial fibrillation. **2015**, 179, 114-21		13
364	Prospective evaluation of prior image constrained compressed sensing (PICCS) algorithm in abdominal CT: a comparison of reduced dose with standard dose imaging. **2015**, 40, 207-21		5
363	The Impact of Iterative Reconstruction in Low-Dose Computed Tomography on the Evaluation of Diffuse Interstitial Lung Disease. **2016**, 17, 950-960		12
362	Physics of Computed Tomography Scanning. **2016**, 145-149		
361	Computed tomography and patient risk: Facts, perceptions and uncertainties. **2016**, 8, 902-915		87
360	Influence of Sinogram-Affirmed Iterative Reconstruction on Computed Tomography-Based Lung Volumetry and Quantification of Pulmonary Emphysema. **2016**, 40, 96-101		3
359	Volumetric CT with sparse detector arrays (and application to Si-strip photon counters). *Physics in Medicine and Biology*, **2016**, 61, 90-113	3.8	4
358	Limits to dose reduction from iterative reconstruction and the effect of through-slice blurring. **2016**,		1
357	A Gaussian Mixture MRF for Model-Based Iterative Reconstruction With Applications to Low-Dose X-Ray CT. **2016**, 2, 359-374		19
356	Early detection and sensitive monitoring of CF lung disease: Prospects of improved and safer imaging. **2016**, 51, S49-S60		30
355	Objective performance assessment of five computed tomography iterative reconstruction algorithms. **2016**, 24, 913-930		5
354	Combination of voxel-based and projection-based methods in terms of convergence for CT reconstruction. *Medical Physics*, **2016**, 43, 2828-2834	4.4	1
353	Inverse synthetic aperture LADAR image construction: an inverse model-based approach. **2016**,		

352	Performance evaluation of iterative reconstruction algorithms for achieving CT radiation dose reduction - a phantom study. **2016**, 17, 511-531		22
351	A comparison of linear interpolation models for iterative CT reconstruction. *Medical Physics*, **2016**, 43, 6455	4.4	12
350	Model based image reconstruction with physics based priors. **2016**,		1
349	A limit on dose reduction possible with CT reconstruction algorithms without prior knowledge of the scan subject. *Medical Physics*, **2016**, 43, 1361-8	4.4	11
348	Technical Note: Evaluation of a 160-mm/256-row CT scanner for whole-heart quantitative myocardial perfusion imaging. *Medical Physics*, **2016**, 43, 4821	4.4	16
347	Computational Imaging for VLBI Image Reconstruction. **2016**,		15
346	Dose reduction in CT urography and vasculature phantom studies using model-based iterative reconstruction. **2016**, 17, 334-342		3
345	Can conclusions drawn from phantom-based image noise assessments be generalized to in vivo studies for the nonlinear model-based iterative reconstruction method?. *Medical Physics*, **2016**, 43, 687-95	4.4	5
344	Low-dose abdominal computed tomography for detection of urinary stone disease - Impact of additional spectral shaping of the X-ray beam on image quality and dose parameters. *European Journal of Radiology*, **2016**, 85, 1058-62	4.7	31
343	Performance analysis of model based iterative reconstruction with dictionary learning in transportation security CT. **2016**,		
342	2.5D dictionary learning based computed tomography reconstruction. **2016**,		4
341	Relaxed Linearized Algorithms for Faster X-Ray CT Image Reconstruction. **2016**, 35, 1090-8		24
340	ASSESSMENT OF CLINICAL IMAGE QUALITY IN PAEDIATRIC ABDOMINAL CT EXAMINATIONS: DEPENDENCY ON THE LEVEL OF ADAPTIVE STATISTICAL ITERATIVE RECONSTRUCTION (ASiR) AND THE TYPE OF CONVOLUTION KERNEL. **2016**, 169, 123-9		6
339	Investigation of cone-beam CT image quality trade-off for image-guided radiation therapy. *Physics in Medicine and Biology*, **2016**, 61, 3317-46	3.8	5
338	Texture-preserved penalized weighted least-squares reconstruction of low-dose CT image via image segmentation and high-order MRF modeling. **2016**,		2
337	Recent developments in the use of computed tomography scanners in coronary artery imaging. **2016**, 13, 545-53		16
336	EMBIRA: An Accelerator for Model-Based Iterative Reconstruction. **2016**, 24, 3243-3256		
335	Robust X-Ray Phase Ptycho-Tomography. **2016**, 23, 944-948		8

334	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	2.6	11
333	Multiresolution iterative reconstruction in high-resolution extremity cone-beam CT. *Physics in Medicine and Biology*, **2016**, 61, 7263-7281	3.8	18
332	Restoration of Thickness, Density, and Volume for Highly Blurred Thin Cortical Bones in Clinical CT Images. **2016**, 44, 3359-3371		6
331	Non-local total-variation (NLTV) minimization combined with reweighted L1-norm for compressed sensing CT reconstruction. *Physics in Medicine and Biology*, **2016**, 61, 6878-6891	3.8	36
330	Low dose CT image reconstruction with learned sparsifying transform. **2016**,		13
329	CT Image Reconstruction by Spatial-Radon Domain Data-Driven Tight Frame Regularization. **2016**, 9, 1063-1083		19
328	Improving Low-dose Cardiac CT Images based on 3D Sparse Representation. **2016**, 6, 22804		7
327	Strategies to Lessen the Radiation Risk from CT: A Multination Perspective. *Current Radiology Reports*, **2016**, 4, 1	0.5	
326	Direct model-based tomographic reconstruction of the complex refractive index. **2016**,		1
325	Comparison of algebraic and analytical approaches to the formulation of the statistical model-based reconstruction problem for X-ray computed tomography. **2016**, 52, 19-27		8
324	Construction of realistic phantoms from patient images and a commercial three-dimensional printer. *Journal of Medical Imaging*, **2016**, 3, 033501	2.6	22
323	Artifacts at Cardiac CT: Physics and Solutions. **2016**, 36, 2064-2083		75
322	Plug-and-Play Priors for Bright Field Electron Tomography and Sparse Interpolation. **2016**, 1-1		110
321	Fast analytical approach of application specific dose efficient spectrum selection for diagnostic CT imaging and PET attenuation correction. *Physics in Medicine and Biology*, **2016**, 61, 7787-7811	3.8	2
320	Noninvasive microwave ablation zone radii estimation using x-ray CT image analysis. *Medical Physics* , **2016**, 43, 4476	4.4	2
319	Development of acoustic model-based iterative reconstruction technique for thick-concrete imaging. **2016**,		
318	Can use of adaptive statistical iterative reconstruction reduce radiation dose in unenhanced head CT? An analysis of qualitative and quantitative image quality. **2016**, 5, 2058460116645831		2
317	Comparison of the diagnostic accuracy of FBP, ASiR, and MBIR reconstruction during CT angiography in the evaluation of a vessel phantom with calcified stenosis in a distal superficial femoral artery in a cadaver extremity. **2016**, 95, e4127		3

316	Regularization Methods for the Analytical Statistical Reconstruction Problem in Medical Computed Tomography. *Lecture Notes in Computer Science*, **2016**, 147-158	0.9	
315	Model-based reconstruction for x-ray diffraction imaging. **2016**,		1
314	CT reconstruction via denoising approximate message passing. **2016**,		
313	Diagnostic accuracy of low-mA chest CT reconstructed with Model Based Iterative Reconstruction in the detection of early pleuro-pulmonary complications following a lung transplantation. **2016**, 26, 3138-46		13
312	Objective assessment of low contrast detectability in computed tomography with Channelized Hotelling Observer. *Physica Medica*, **2016**, 32, 76-83	2.7	31
311	Noise Reduction in Abdominal Computed Tomography Applying Iterative Reconstruction (ADMIRE). **2016**, 23, 1230-8		25
310	Model-based iterative reconstruction for flat-panel cone-beam CT with focal spot blur, detector blur, and correlated noise. *Physics in Medicine and Biology*, **2016**, 61, 296-319	3.8	31
309	A computer simulation method for low-dose CT images by use of real high-dose images: a phantom study. **2016**, 9, 44-52		5
308	Quantitative Features of Liver Lesions, Lung Nodules, and Renal Stones at Multi-Detector Row CT Examinations: Dependency on Radiation Dose and Reconstruction Algorithm. *Radiology*, **2016**, 279, 185-94	20.5	78
307	Line Integral Alternating Minimization Algorithm for Dual-Energy X-Ray CT Image Reconstruction. **2016**, 35, 685-98		10
306	A phantom-based forward projection approach in support of model-based iterative reconstructions for HAADF-STEM tomography. **2016**, 160, 7-17		1
305	Mixed Confidence Estimation for Iterative CT Reconstruction. **2016**, 35, 2005-14		
304	Diagnostic performance of abdominal CT for diagnosis of pelvic fractures: comparison with pelvic CT. *Acta Radiologica*, **2016**, 57, 1244-50	2	2
303	Comparison of new and conventional versions of model-based iterative reconstruction in reduced-dose computed tomography for diagnosis of hepatic steatosis. **2016**, 34, 339-48		1
302	High performance model based image reconstruction. **2016**,		12
301	Statistical iterative reconstruction using adaptive fractional order regularization. **2016**, 7, 1015-29		52
300	Probabilistic atlas prior for CT image reconstruction. *Computer Methods and Programs in Biomedicine*, **2016**, 128, 119-36	6.9	3
299	How to perform low-dose computed tomography for renal colic in clinical practice. **2016**, 97, 393-400		16

298	Computed Tomography Angiography: A Review and Technical Update. **2016**, 54, 1-12		24
297	Extracting Information From Previous Full-Dose CT Scan for Knowledge-Based Bayesian Reconstruction of Current Low-Dose CT Images. **2016**, 35, 860-70		49
296	Optimizing radiation dose by using advanced modelled iterative reconstruction in high-pitch coronary CT angiography. **2016**, 26, 459-68		36
295	Image quality and dose optimisation for infant CT using a paediatric phantom. **2016**, 26, 1387-95		7
294	Impact of an intra-cycle motion correction algorithm on overall evaluability and diagnostic accuracy of computed tomography coronary angiography. **2016**, 26, 147-56		30
293	Memory-efficient algorithm for stored projection and backprojection matrix in helical CT. *Medical Physics*, **2017**, 44, 1287-1300	4.4	7
292	Direct Reconstruction of CT-based Attenuation Correction Images for PET with Cluster-Based Penalties. **2017**, 64, 959-968		0
291	Model-based Iterative CT Image Reconstruction on GPUs. **2017**,		11
290	Discriminative feature representation: an effective postprocessing solution to low dose CT imaging. *Physics in Medicine and Biology*, **2017**, 62, 2103-2131	3.8	22
289	Coronary Artery Stent Evaluation with Model-based Iterative Reconstruction at Coronary CT Angiography. **2017**, 24, 975-981		20
288	GPU-based Branchless Distance-Driven Projection and Backprojection. **2017**, 3, 617-632		16
287	Brain Computed Tomography Compared with Facial 3-Dimensional Computed Tomography for Diagnosis of Facial Fractures. **2017**, 184, 32-37.e2		3
286	Reduced dose CT with model-based iterative reconstruction compared to standard dose CT of the chest, abdomen, and pelvis in oncology patients: intra-individual comparison study on image quality and lesion conspicuity. **2017**, 42, 2279-2288		16
285	Interpolation based enhancement of sparse-view projection data for low dose FBP reconstruction. **2017**,		
284	Reduction of metal artifacts due to dental hardware in computed tomography angiography: assessment of the utility of model-based iterative reconstruction. **2017**, 59, 231-235		13
283	CT image quality in sinogram affirmed iterative reconstruction phantom study - is there a point of diminishing returns?. **2017**, 47, 333-341		5
282	Effects of pure and hybrid iterative reconstruction algorithms on high-resolution computed tomography in the evaluation of interstitial lung disease. *European Journal of Radiology*, **2017**, 93, 243-251	3.47	16
281	A method to extract image noise level from patient images in CT. *Medical Physics*, **2017**, 44, 2173-2184	4.4	16

280	Subjective and objective heterogeneity scores for differentiating small renal masses using contrast-enhanced CT. **2017**, 42, 1485-1492		25
279	A prospective evaluation of contrast and radiation dose and image quality in cardiac CT in children with complex congenital heart disease using low-concentration iodinated contrast agent and low tube voltage and current. **2017**, 90, 20160669		7
278	Task-based statistical image reconstruction for high-quality cone-beam CT. *Physics in Medicine and Biology*, **2017**, 62, 8693-8719	3.8	11
277	Assessment of prior image induced nonlocal means regularization for low-dose CT reconstruction: Change in anatomy. *Medical Physics*, **2017**, 44, e264-e278	4.4	14
276	Third version of vendor-specific model-based iterativereconstruction (Veo 3.0): evaluation of CT image quality in the abdomen using new noise reduction presets and varied slice optimization. **2017**, 90, 20170188		6
275	A Mathematical Model for Adaptive Computed Tomography Sensing. **2017**, 3, 551-565		3
274	Radiation Dose Reduction in CT Myocardial Perfusion Imaging Using SMART-RECON. **2017**, 36, 2557-2568		8
273	Massively parallel 3D image reconstruction. **2017**,		13
272	Model-based Iterative CT Image Reconstruction on GPUs. **2017**, 52, 207-220		6
271	3D reconstruction of the magnetic vector potential using model based iterative reconstruction. **2017**, 182, 131-144		7
270	Evaluation of Abdominal Computed Tomography Image Quality Using a New Version of Vendor-Specific Model-Based Iterative Reconstruction. **2017**, 41, 67-74		11
269	Synthetic Aperature LADAR: A Model-Based Approach. **2017**, 3, 901-916		10
268	A Model-Based Iterative Reconstruction Approach to Tunable Diode Laser Absorption Tomography. **2017**, 3, 876-890		4
267	CT of facial fracture fixation: an experimental study of artefact reducing methods. **2017**, 46, 20160261		4
266	Comparison Between Pre-Log and Post-Log Statistical Models in Ultra-Low-Dose CT Reconstruction. **2017**, 36, 707-720		57
265	Fast Variance Prediction for Iteratively Reconstructed CT Images With Locally Quadratic Regularization. **2017**, 36, 17-26		8
264	Reaching for better image quality and lower radiation dose in head and neck CT: advanced modeled and sinogram-affirmed iterative reconstruction in combination with tube voltage adaptation. **2017**, 46, 20160131		14
263	First experiences with model based iterative reconstructions influence on quantitative plaque volume and intensity measurements in coronary computed tomography angiography. **2017**, 23, 77-79		4

262	Mesoscale imaging with cryo-light and X-rays: Larger than molecular machines, smaller than a cell. **2017**, 109, 24-38	19
261	Optimizing CT technique to reduce radiation dose: effect of changes in kVp, iterative reconstruction, and noise index on dose and noise in a human cadaver. **2017**, 10, 180-188	5
260	Left atrium and pulmonary vein imaging using sub-millisiviert cardiac computed tomography: Impact on radiofrequency catheter ablation cumulative radiation exposure and outcome in atrial fibrillation patients. **2017**, 228, 805-811	2
259	Efficacy of model-based iterative reconstruction technique in non-enhanced CT of the renal tracts for ureteric calculi. **2017**, 24, 133-138	2
258	Modeling and Pre-Treatment of Photon-Starved CT Data for Iterative Reconstruction. **2017**, 36, 277-287	16
257	Z-Index Parameterization for Volumetric CT Image Reconstruction via 3-D Dictionary Learning. **2017**, 36, 2466-2478	23
256	Hybrid Pre-Log and Post-Log Image Reconstruction for Computed Tomography. **2017**, 36, 2457-2465	8
255	Impact of iterative reconstruction vs. filtered back projection on image quality in 320-slice CT coronary angiography: Insights from the CORE320 multicenter study. **2017**, 96, e8452	12
254	Low-dose CT reconstruction using spatially encoded nonlocal penalty. *Medical Physics*, **2017**, 44, e376-e390	18
253	Small-Cell Lung Cancer Detection Using a Supervised Machine Learning Algorithm. **2017**,	17
252	Model-based iterative reconstruction for neutron laminography. **2017**,	4
251	Phase-error estimation and image reconstruction from digital-holography data using a Bayesian framework. **2017**, 34, 1659-1669	21
250	Evaluation of the CT Parameters to Suppress Renal Cysts Pseudoenhancement Effect: Influence of the Virtual Monochromatic Spectral Images, the Model-based Iterative Reconstruction Algorithm and the Aperture Size in Phantom Model. **2017**, 73, 636-645	0
249	Physics based modeling for the development of soft segmentation and reconstruction algorithms. **2017**,	1
248	New adaptive statistical iterative reconstruction ASiR-V: Assessment of noise performance in comparison to ASiR. **2018**, 19, 275-286	32
247	Penalized-Likelihood Reconstruction With High-Fidelity Measurement Models for High-Resolution Cone-Beam Imaging. **2018**, 37, 988-999	15
246	Adaptive Iterative Dose Reduction 3D Integrated with Automatic Tube Current Modulation for CT Coronary Artery Calcium Quantification: Comparison to Traditional Filtered Back Projection in an Anthropomorphic Phantom and Patients. **2018**, 25, 1010-1017	5
245	Image Quality, Overall Evaluability, and Effective Radiation Dose of Coronary Computed Tomography Angiography With Prospective Electrocardiographic Triggering Plus Intracycle Motion Correction Algorithm in Patients With a Heart Rate Over 65 Beats Per Minute. **2018**, 33, 225-231	8

244	Prospective Comparison of Standard- Versus Low-Radiation-Dose CT Enterography for the Quantitative Assessment of Crohn Disease. **2018**, 210, W54-W62		13
243	Impact of model-based iterative reconstruction (MBIR) on image quality in cerebral CT angiography before and after intracranial aneurysm treatment. *European Journal of Radiology*, **2018**, 102, 109-114	4.7	6
242	PWLS-ULTRA: An Efficient Clustering and Learning-Based Approach for Low-Dose 3D CT Image Reconstruction. **2018**, 37, 1498-1510		46
241	Detector Blur and Correlated Noise Modeling for Digital Breast Tomosynthesis Reconstruction. **2018**, 37, 116-127		11
240	Screening for lung cancer using sub-millisievert chest CT with iterative reconstruction algorithm: image quality and nodule detectability. **2018**, 91, 20170658		16
239	Experience With Iterative Reconstruction Techniques for Abdominopelvic Computed Tomography in Morbidly and Super Obese Patients. **2018**, 42, 124-132		9
238	2.5D Deep Learning For CT Image Reconstruction Using A Multi-GPU Implementation. **2018**,		10
237	DEEP BACK PROJECTION FOR SPARSE-VIEW CT RECONSTRUCTION. **2018**,		6
236	Image guidance in proton therapy for lung cancer. **2018**, 7, 160-170		5
235	A Hybrid Prior Model for Tunable Diode Laser Absorption Tomography. **2018**,		
234	DEEP NEURAL NETWORKS FOR NON-LINEAR MODEL-BASED ULTRASOUND RECONSTRUCTION. **2018**,		3
233	Research Status and Prospect for CT Imaging. **2018**,		
232	cuMBIR. **2018**,		10
231	Statistical weights for model-based reconstruction in cone-beam CT with electronic noise and dual-gain detector readout. *Physics in Medicine and Biology*, **2018**, 63, 245018	3.8	5
230	Noise and Resolution Performance Evaluation for Statistical and Non-Statistical Iterative CBCT Reconstruction Methods. **2018**,		
229	Comparison of Image Qualities of 80 kVp and 120 kVp CT Venography Using Model-Based Iterative Reconstruction at Same Radiation Dose. **2018**, 78, 235		1
228	Deep Residual Learning for Model-Based Iterative CT Reconstruction Using Plug-and-Play Framework. **2018**,		9
227	A framework for performance characterization of energy-resolving photon-counting detectors. *Medical Physics*, **2018**, 45, 4897-4915	4.4	7

226	Technical Note: FreeCT_ICD: An open-source implementation of a model-based iterative reconstruction method using coordinate descent optimization for CT imaging investigations. *Medical Physics*, **2018**, 45, 3591	4.4	3
225	Hybrid Imaging: Instrumentation and Data Processing. **2018**, 6,		18
224	A Joint Row and Column Action Method for Cone-Beam Computed Tomography. **2018**, 4, 599-608		2
223	Multi-slice CT: Current Technology and Future Developments. **2018**, 3-34		2
222	Low-Dose Computed Tomography Colonography Technique. **2018**, 56, 709-717		3
221	Anisotropic modeling and joint-MAP stitching for improved ultrasound model-based iterative reconstruction of large and thick specimens. **2018**,		2
220	On the data acquisition, image reconstruction, cone beam artifacts, and their suppression in axial MDCT and CBCT - A review. *Medical Physics*, **2018**, 45, e761	4.4	11
219	A GPU-Accelerated Multivoxel Update Scheme for Iterative Coordinate Descent (ICD) Optimization in Statistical Iterative CT Reconstruction (SIR). **2018**, 4, 355-365		4
218	Regularization strategies in statistical image reconstruction of low-dose x-ray CT: A review. *Medical Physics*, **2018**, 45, e886-e907	4.4	20
217	Impact of iterative model reconstruction combined with dose reduction on the image quality of head and neck CTA in children. **2018**, 8, 12613		11
216	Fourth-order partial differential equations based anisotropic diffusion model for low-dose CT images. **2018**, 32, 1850300		20
215	Demonstration of single-shot digital holography using a Bayesian framework. **2018**, 35, 103-107		18
214	Low-dose CT image reconstruction using gain intervention-based dictionary learning. **2018**, 32, 1850148		26
213	Iterative reconstructions in multiphasic CT imaging of the liver: qualitative and task-based analyses of image quality. **2018**, 73, 834.e9-834.e16		3
212	Regularization Analysis and Design for Prior-Image-Based X-Ray CT Reconstruction. **2018**, 37, 2675-2686		10
211	Knowledge-based iterative reconstructions for imaging of coronary artery stents: first in-vitro experience and comparison of different radiation dose levels and kernel settings. *Acta Radiologica*, **2019**, 60, 160-167	2	1
210	An Empirical Data Inconsistency Metric (DIM) Driven CT Image Reconstruction Method. **2019**, 38, 337-348		2
209	The Use of Model-based Iterative Reconstruction to Optimize Chest CT Examinations for Diagnosing Lung Metastases in Patients with Sarcoma: A Phantom Study. **2019**, 26, 50-61		2

208	Feasibility of Submillisievert CT of the Skeletal Pelvis Using Iterative Reconstruction: A Human Cadaver Study. **2019**, 213, 903-911		3
207	Scatter Corrections in X-Ray Computed Tomography: A Physics-Based Analysis. **2019**, 124, 1-23		4
206	Pilot clinical study of ascorbic acid treatment in cardiac catheterization. **2019**, 60, 573-578		1
205	Can fully iterative reconstruction technique enable routine abdominal CT at less than 1 mSv?. **2019**, 6, 225-230		6
204	Image reconstruction for interrupted-beam x-ray CT on diagnostic clinical scanners. *Physics in Medicine and Biology*, **2019**, 64, 155007	3.8	6
203	Blind deconvolution in model-based iterative reconstruction for CT using a normalized sparsity measure. *Physics in Medicine and Biology*, **2019**, 64, 215010	3.8	2
202	Technical Note: Increased photon starvation artifacts at low helical pitch in ultra-low-dose CT. *Medical Physics*, **2019**, 46, 5538-5543	4.4	1
201	Sparse-view statistical image reconstruction with improved total variation regularization for X-ray micro-CT imaging. **2019**, 14, P08023-P08023		5
200	Ordered subsets Non-Local means constrained reconstruction for sparse view cone beam CT system. **2019**, 42, 1117-1128		
199	State of the Art in Abdominal CT: The Limits of Iterative Reconstruction Algorithms. *Radiology*, **2019**, 293, 491-503	20.5	60
198	Phantom and Preclinical Studies for Image Improvement in Clinical CT. **2019**, 3, 96-102		3
197	Diagnostic performance and image quality of iterative model-based reconstruction of coronary CT angiography using 100 kVp for heavily calcified coronary vessels. *PLoS ONE*, **2019**, 14, e0222315	3.7	2
196	Noise assessment across two generations of iterative reconstruction algorithms of three manufacturers using bone reconstruction kernel. **2019**, 100, 763-770		6
195	Tensor framelet based iterative image reconstruction algorithm for low-dose multislice helical CT. *PLoS ONE*, **2019**, 14, e0210410	3.7	2
194	Comparison of noise-magnitude and noise-texture across two generations of iterative reconstruction algorithms from three manufacturers. **2019**, 100, 401-410		14
193	Future Technological Advances in Cardiac CT. **2019**, 873-892		1
192	An adaptive regularization method for low-dose CT reconstruction from CT transmission data in Poisson□aussian noise. **2019**, 188, 172-186		3
191	Retrospective review of CT brain image quality, diagnostic adequacy and radiation dose in a paediatric population imaged at a non-paediatric tertiary hospital. **2019**, 63, 596-601		0

190	The usefulness of full-iterative reconstruction algorithm for the visualization of cystic artery on CT angiography. **2019**, 37, 526-533		8
189	SparseCT: System concept and design of multislit collimators. *Medical Physics*, **2019**, 46, 2589-2599	4.4	4
188	Physics-Based Regularizer for Joint Soft Segmentation and Reconstruction of Electron Microscopy Images of Polycrystalline Microstructures. **2019**, 5, 660-674		1
187	Applications of stem cells and bioprinting for potential treatment of diabetes. **2019**, 11, 13-32		16
186	In vitro optimization and comparison of CT angiography versus radial cardiovascular magnetic resonance for the quantification of cross-sectional areas and coronary endothelial function. **2019**, 21, 11		2
185	SUPER Learning: A Supervised-Unsupervised Framework for Low-Dose CT Image Reconstruction. **2019**,		1
184	Feasibility of thin-slice abdominal CT in overweight patients using a vendor neutral image-based denoising algorithm: Assessment of image noise, contrast, and quality. *PLoS ONE*, **2019**, 14, e0226521	3.7	2
183	Magnetic resonance-based computed tomography metal artifact reduction using Bayesian modelling. *Physics in Medicine and Biology*, **2019**, 64, 245012	3.8	1
182	Ultra-low-dose chest computed tomography for interstitial lung disease using model-based iterative reconstruction with or without the lung setting. **2019**, 98, e15936		8
181	Accelerating iterative coordinate descent using a stored system matrix. *Medical Physics*, **2019**, 46, e801-e809	4.4	4
180	Impact of the non-negativity constraint in model-based iterative reconstruction from CT data. *Medical Physics*, **2019**, 46, e835-e854	4.4	3
179	Error-Splitting Forward Model for Iterative Reconstruction in X-Ray Computed Tomography and Application With Gauss–Markov–Potts Prior. **2019**, 5, 317-332		
178	A Feasibility Study of Extracting Tissue Textures From a Previous Full-Dose CT Database as Prior Knowledge for Bayesian Reconstruction of Current Low-Dose CT Images. **2019**, 38, 1981-1992		17
177	Evaluation of image quality and radiation dose saving comparing knowledge model-based iterative reconstruction on 80-kV CT pulmonary angiography (CTPA) with hybrid iterative reconstruction on 100-kV CT. **2019**, 26, 145-153		1
176	An efficient low-dose CT reconstruction technique using partial derivatives based guided image filter. **2019**, 78, 14733-14752		9
175	The effect of vertical centering and scout direction on automatic tube voltage selection in chest CT: a preliminary phantom study on two different CT equipments. **2019**, 6, 24-32		6
174	Noise reduction and image quality in ultra-high resolution computed tomography of the temporal bone using advanced modeled iterative reconstruction. *Acta Radiologica*, **2019**, 60, 1135-1143	2	3
173	The evolution of image reconstruction for CT-from filtered back projection to artificial intelligence. **2019**, 29, 2185-2195		164

172	Prior-Guided Metal Artifact Reduction for Iterative X-Ray Computed Tomography. **2019**, 38, 1532-1542		11
171	Image Reconstruction: From Sparsity to Data-adaptive Methods and Machine Learning. **2020**, 108, 86-109		98
170	Correlation of Algorithmic and Visual Assessment of Lesion Detection in Clinical Images. **2020**, 27, 847-855		6
169	SPULTRA: Low-Dose CT Image Reconstruction With Joint Statistical and Learned Image Models. **2020**, 39, 729-741		9
168	CT Super-Resolution GAN Constrained by the Identical, Residual, and Cycle Learning Ensemble (GAN-CIRCLE). **2020**, 39, 188-203		140
167	CT iterative reconstruction algorithms: a task-based image quality assessment. **2020**, 30, 487-500		45
166	Algorithm-based artifact reduction in patients with arms-down positioning in computed tomography. *Physica Medica*, **2020**, 69, 61-69	2.7	3
165	A Task-dependent Investigation on Dose and Texture in CT Image Reconstruction. **2020**, 4, 441-449		3
164	Contrast-Medium Anisotropy-Aware Tensor Total Variation Model for Robust Cerebral Perfusion CT Reconstruction with Low-Dose Scans. **2020**, 6, 1375-1388		3
163	The use of artificial intelligence in computed tomography image reconstruction - A literature review. **2020**, 51, 671-677		8
162	. **2020**, 6, 1153-1166		6
161	Non-Positive Corrections and Variance Models for Iterative Post-Log Reconstruction of Extremely Low-Dose CT Data. **2020**, 77, 177-185		
160	3D Deep Learning on Medical Images: A Review. **2020**, 20,		95
159	Evaluation of Image Quality for 7 Iterative Reconstruction Algorithms in Chest Computed Tomography Imaging: A Phantom Study. **2020**, 44, 673-680		2
158	The Practicality of Stochastic Optimization in Imaging Inverse Problems. **2020**, 6, 1471-1485		6
157	Block Axial Checkerboarding: A Distributed Algorithm for Helical X-Ray CT Reconstruction. **2020**,		
156	Task-based characterization of a deep learning image reconstruction and comparison with filtered back-projection and a partial model-based iterative reconstruction in abdominal CT: A phantom study. *Physica Medica*, **2020**, 76, 28-37	2.7	29
155	Effect of Unmatched System Models on Iterative Reconstruction in Computed Tomography: A Phantom Study. **2020**, 76, 866-873		

154	Techniques for high-fidelity X-ray micro-tomography of additively manufactured metal components. **2020**, 35, 241-251		1
153	Image quality and dose reduction opportunity of deep learning image reconstruction algorithm for CT: a phantom study. **2020**, 30, 3951-3959		90
152	Image Quality and Lesion Detection on Deep Learning Reconstruction and Iterative Reconstruction of Submillisievert Chest and Abdominal CT. **2020**, 214, 566-573		69
151	Comparison of image quality and focal lesion detection in abdominopelvic CT: Potential dose reduction using advanced modelled iterative reconstruction. **2020**, 62, 41-48		9
150	Chest CT in patients after lung transplantation: A retrospective analysis to evaluate impact on image quality and radiation dose using spectral filtration tin-filtered imaging. *PLoS ONE*, **2020**, 15, e0228376	3.7	0
149	Scalable Double Regularization for 3D Nano-CT Reconstruction. **2020**, 192, 107271-107271		1
148	Investigation of Low-Dose CT Image Denoising Using Unpaired Deep Learning Methods. **2021**, 5, 224-234		13
147	Low-dose CT image and projection dataset. *Medical Physics*, **2021**, 48, 902-911	4.4	25
146	Rapid measurement of the low contrast detectability of CT scanners. *Medical Physics*, **2021**, 48, 1054-1063	3.4	1
145	Photon Counting CT: Clinical Applications and Future Developments. **2021**, 5, 441-452		12
144	FleXCT: a flexible X-ray CT scanner with 10 degrees of freedom. **2021**, 29, 3438-3457		6
143	Limited-Angle CT Reconstruction via the L_1/L_2 Minimization. **2021**, 14, 749-777		7
142	Improved Acquisition and Reconstruction for Wavelength-Resolved Neutron Tomography. **2021**, 7,		1
141	Effect of a new deep learning image reconstruction algorithm for abdominal computed tomography imaging on image quality and dose reduction compared with two iterative reconstruction algorithms: a phantom study.. **2022**, 12, 229-243		3
140	Technical Note: Quality assessment of virtual monochromatic spectral images on a dual energy CT scanner. *Physica Medica*, **2021**, 82, 114-121	2.7	1
139	Prior-image-based CT reconstruction using attenuation-mismatched priors. *Physics in Medicine and Biology*, **2021**, 66, 064007	3.8	0
138	A feasibility study of realizing low-dose abdominal CT using deep learning image reconstruction algorithm. **2021**, 29, 361-372		5
137	A Novel Low-Dose Dual-Energy Imaging Method for a Fast-Rotating Gantry-Type CT Scanner. **2021**, 40, 1007-1020		2

136	Direct reconstruction of anatomical change in low-dose lung nodule surveillance. *Journal of Medical Imaging*, **2021**, 8, 023503	2.6	
135	Theory, method, and test tools for determination of 3D MTF characteristics in cone-beam CT. *Medical Physics*, **2021**, 48, 2772-2789	4.4	0
134	Influence of Adaptive Statistical Iterative Reconstructions on CT Radiomic Features in Oncologic Patients. **2021**, 11,		2
133	Physics-based iterative reconstruction for dual-source and flying focal spot computed tomography. *Medical Physics*, **2021**, 48, 3595-3613	4.4	1
132	PWLS-PR: low-dose computed tomography image reconstruction using a patch-based regularization method based on the penalized weighted least squares total variation approach. **2021**, 11, 2541-2559		2
131	A Bias-Reducing Loss Function for CT Image Denoising. **2021**,		0
130	Accuracy of thin-slice model-based iterative reconstruction designed for brain CT to diagnose acute ischemic stroke in the middle cerebral artery territory: a multicenter study. **2021**, 63, 2013-2021		1
129	Superior objective and subjective image quality of deep learning reconstruction for low-dose abdominal CT imaging in comparison with model-based iterative reconstruction and filtered back projection. **2021**, 94, 20201357		2
128	A Voxel-Based Assessment of Noise Properties in Computed Tomography Imaging with the ASiR-V and ASiR Iterative Reconstruction Algorithms. **2021**, 11, 6561		1
127	Reconstructing 3D Volumes of Biological Specimens Using a Model Based Iterative Approach. **2021**, 27, 278-279		
126	Weakly-supervised progressive denoising with unpaired CT images. **2021**, 71, 102065		1
125	Images in Space and Time. **2021**, 54, 1-38		2
124	An efficient algorithm to compute the X-ray transform. 1-19		0
123	Model-based digital holographic imaging using mulit-shot data. **2021**,		
122	Least-squares and maximum-likelihood in XCT. **2021**,		
121	Multilayer residual sparsifying transform (MARS) model for low-dose CT image reconstruction. *Medical Physics*, **2021**, 48, 6388-6400	4.4	
120	CT Noise-Reduction Methods for Lower-Dose Scanning: Strengths and Weaknesses of Iterative Reconstruction Algorithms and New Techniques. **2021**, 41, 1493-1508		4
119	Magnification-driven B-spline interpolation for cone-beam projection and backprojection. *Medical Physics*, **2021**, 48, 6339-6361	4.4	

118	Deep-learning-based image reconstruction in dynamic contrast-enhanced abdominal CT: image quality and lesion detection among reconstruction strength levels. **2021**, 76, 710.e15-710.e24		6
117	Artificial intelligence in medical imaging: implications for patient radiation safety. **2021**, 94, 20210406		2
116	Deep Learning With Adaptive Hyper-Parameters for Low-Dose CT Image Reconstruction. **2021**, 7, 648-660		5
115	Unified Supervised-Unsupervised (SUPER) Learning for X-Ray CT Image Reconstruction. **2021**, 40, 2986-3001		1
114	3D Image Reconstruction. **2021**, 51-113		
113	Rapid kV Switching Dual-Energy CT Imaging. **2015**, 45-60		2
112	Cardiovascular Computed Tomography: Current and Future Scanning System Design. **2016**, 25-32		1
111	CT Technology for Imaging the Thorax: State of the Art. **2016**, 3-28		2
110	A Mathematical Model for Extremely Low Dose Adaptive Computed Tomography Acquisition. *Lecture Notes in Computer Science*, **2014**, 13-33	0.9	1
109	Generative adversarial network-based sinogram super-resolution for computed tomography imaging. *Physics in Medicine and Biology*, **2020**, 65, 235006	3.8	6
108	Deep Learning Based High-Resolution Reconstruction of Trabecular Bone Microstructures from Low-Resolution CT Scans using GAN-CIRCLE. **2020**, 11317,		11
107	High performance model based image reconstruction. **2016**, 51, 1-12		5
106	Consensus equilibrium framework for super-resolution and extreme-scale CT reconstruction. **2019**,		5
105	Imaging through distributed-volume aberrations using single-shot digital holography. **2019**, 36, A20-A33		17
104	Single-frequency LADAR super-resolution Doppler tomography for extended targets. **2019**, 27, 12923-12938		2
103	Far-field thermal imaging below diffraction limit. **2020**, 28, 7036-7050		2
102	X-ray dose reduction in abdominal computed tomography using advanced iterative reconstruction algorithms. *PLoS ONE*, **2014**, 9, e92568	3.7	21
101	Image quality in children with low-radiation chest CT using adaptive statistical iterative reconstruction and model-based iterative reconstruction. *PLoS ONE*, **2014**, 9, e96045	3.7	9

100	High fidelity system modeling for high quality image reconstruction in clinical CT. *PLoS ONE*, **2014**, 9, e111625	3.7	3
99	Optimization of SPECT-CT Hybrid Imaging Using Iterative Image Reconstruction for Low-Dose CT: A Phantom Study. *PLoS ONE*, **2015**, 10, e0138658	3.7	9
98	An Efficient Augmented Lagrangian Method for Statistical X-Ray CT Image Reconstruction. *PLoS ONE*, **2015**, 10, e0140579	3.7	4
97	Are quantitative features of lung nodules reproducible at different CT acquisition and reconstruction parameters?. *PLoS ONE*, **2020**, 15, e0240184	3.7	8
96	Joint image reconstruction and segmentation: Comparison of two algorithms for few-view tomography. **2019**, 43, 1008-1020		2
95	Superior CT coronary angiography image quality at lower radiation exposure with second generation 320-detector row CT in patients with elevated heart rate: a comparison with first generation 320-detector row CT. **2014**, 4, 299-306		19
94	The investigation of dose and image quality of chest computed tomography using different combinations of noise index and adaptive statistic iterative reconstruction level. **2019**, 29, 53-60		4
93	Dose Optimization in Computer Tomography Pediatric Cranial Scans. **2019**, 09, 181-193		1
92	Coronary CT angiography: Dose reduction strategies. **2013**, 5, 465-72		21
91	Performance Comparison of Ray-Driven System Models in Model-Based Iterative Reconstruction for Transmission Computed Tomography. **2014**, 35, 142-150		1
90	From EMI to AI: a brief history of commercial CT reconstruction algorithms. *Journal of Medical Imaging*, **2021**, 8, 052111	2.6	2
89	A New Statistical Reconstruction Method for the Computed Tomography Using an X-Ray Tube with Flying Focal Spot. **2021**, 11, 271-286		3
88	Cardiovascular Computed Tomography: Current and Future Scanning System Design. **2010**, 21-27		
87	A Statistical Tailored Image Reconstruction from Projections Method. **2010**, 181-190		1
86	A Statistical Appraoch to Image Reconstruction from Projections Problem Using Recurrent Neural Network. *Lecture Notes in Computer Science*, **2010**, 138-141	0.9	3
85	Algebraic Reconstruction Techniques. **2011**, 233-265		0
84	Strategien zur Strahlendosisreduktion. **2011**, 201-208		
83	GPU Acceleration of Iterative Digital Breast Tomosynthesis. **2011**, 647-657		

82	A Neuronal Approach to the Statistical Image Reconstruction from Projections Problem. *Lecture Notes in Computer Science*, **2012**, 344-353	0.9	3
81	An Analytical Approach to the Image Reconstruction Problem Using EM Algorithm. *Lecture Notes in Computer Science*, **2012**, 495-500	0.9	0
80	Neuronal Model-Based Image Reconstruction from Projections Method. *Lecture Notes in Computer Science*, **2013**, 580-587	0.9	
79	Principles of CT Imaging. **2014**, 77-105		
78	Using of EM Algorithm to Image Reconstruction Problem with Tomography Noises. **2014**, 37-43		
77	Ultrafast Iterative Model-Based Statistical 3D Reconstruction Algorithm for X-ray Computed Tomography. **2014**, 187-196		2
76	4. Clinical application 2: iterative image reconstruction for x-ray computed tomography. **2014**, 70, 715-20		
75	[The Fundamental Principle in X-ray CT Scanner]. **2015**, 71, 1123-31		0
74	Penalized-Likelihood Image Reconstruction for Transmission Tomography Using Spline Regularizers. **2015**, 36, 211-220		
73	Analytical Statistical Approach for Fan-Beam Scanners. **2016**, 231-243		
72	Low Dose CT Image Restoration by Incremental Learning and Ant Colony Optimization. **2016**,		
71	Parallel Realizations of the Iterative Statistical Reconstruction Algorithm for 3D Computed Tomography. *Lecture Notes in Computer Science*, **2017**, 473-484	0.9	1
70	Appraisal of radiation dose with 64-slice computed tomography perfusion in lung cancer patients with special reference to SSDE: An initial experience in a tertiary care hospital. **2017**, 27, 389-396		1
69	Optimization Methods for Synthetic Aperture Radar Imaging. **2018**, 71-103		1
68	Computertomographie. **2018**, 153-203		1
67	Simulation-Based Optimization as a Service for Dynamic Data-Driven Applications Systems. **2018**, 589-614		1
66	OBSOLETE: Imaging: CT Scanning of the Heart and Great Vessels. **2018**,		
65	Imaging: CT Scanning of the Heart and Great Vessels. **2018**, 12-34		

64	Using Scattered X-Rays to Improve the Estimation Accuracy of Attenuation Coefficients: A Fundamental Analysis. **2018**, E101.A, 1101-1114		1
63	Iterative Statistical Reconstruction Algorithm Based on C-C Data Model with the Direct Use of Projections Performed in Spiral Cone-Beam CT Scanners. **2019**, 56-66		
62	3-D Shape Reconstruction Based CT Image Enhancement. **2019**, 413-419		
61	Accelerating coordinate descent in iterative reconstruction. **2019**,		
60	Iterative CT image reconstruction using neural network optimization algorithms. **2019**,		
59	CT Image Quality Characterization. **2020**, 85-124		
58	CT Statistical and Iterative Reconstructions and Post Processing. **2020**, 45-59		0
57	CT Myocardial Perfusion Imaging. **2020**, 367-393		
56	Medical CT Image Super-Resolution via Cyclic Feature Concentration Network. *Lecture Notes in Computer Science*, **2020**, 3-13	0.9	0
55	A Practical Statistical Approach to the Reconstruction Problem Using a Single Slice Rebinning Method. **2020**, 10, 137-149		8
54	Computationally Efficient System Matrix Calculation Techniques in Computed Tomography Iterative Reconstruction. *Journal of Medical Signals and Sensors*, **2020**, 10, 1-11	1	
53	Procedure for optimal implementation of automatic tube potential selection in pediatric CT to reduce radiation dose and improve workflow. **2021**, 22, 194-202		
52	Model-based dual-energy tomographic image reconstruction of objects containing known metal components. *Physics in Medicine and Biology*, **2020**, 65, 245046	3.8	2
51	[Quantitative Analysis of Emphysema in Ultra-high-resolution CT by Using Deep Learning Reconstruction: Comparison with Hybrid Iterative Reconstruction]. **2020**, 76, 1163-1172		1
50	Forward Projection for Use with Iterative Reconstruction. 27-55		
49	Optimal kVp Selection for Contrast CT Imaging Based on a Projection-domain Method. **2014**, 2014, 173-177		
48	Information Propagation in Prior-Image-Based Reconstruction. **2012**, 2012, 334-338		4
47	Morphology supporting function: attenuation correction for SPECT/CT, PET/CT, and PET/MR imaging. *Quarterly Journal of Nuclear Medicine and Molecular Imaging*, **2016**, 60, 25-39	1.4	12

46	[Effect of Scanning and Reconstruction Parameters on Three Dimensional Volume and CT Value Measurement of Pulmonary Nodules: A Phantom Study]. *Chinese Journal of Lung Cancer*, **2017**, 20, 562-567	0.6	1
45	[Sparse-view helical CT reconstruction based on tensor total generalized variation minimization]. *Nan Fang Yi Ke Da Xue Xue Bao = Journal of Southern Medical University*, **2019**, 39, 1213-1220	0.5	
44	Model-based reconstruction for enhanced x-ray CT of dense tri-structural isotropic particles.. *Applied Optics*, **2022**, 61, C73-C79	1.7	1
43	Model-based adaptive filter for a dedicated cardiovascular CT scanner: Assessment of image noise, sharpness and quality. *European Journal of Radiology*, **2021**, 145, 110032	4.7	2
42	ANALYSIS OF ASIR VARIATION EFFECT TO SNR ON UNENHANCED ABDOMINAL CT SCAN IN UROLITHIASIS. *Journal of Vocational Health Studies*, **2020**, 4, 78	0.2	
41	Model-based Reconstruction for Single Particle Cryo-Electron Microscopy. **2020**,		
40	Low-dose Cone-Beam Computed Tomography Reconstruction through a fast Three-Dimensional Compressed Sensing Method Based on the Three-Dimensional Pseudo-polar Fourier Transform.. *Journal of Medical Signals and Sensors*, **2022**, 12, 8-24	1	
39	A novel simulation-driven reconstruction approach for X-ray computed tomography.. *Medical Physics*, **2022**,	4.4	
38	Can optimized model-based iterative reconstruction improve the contrast of liver lesions in CT?. *Acta Radiologica*, **2022**, 2841851211070119	2	0
37	Quantitative measurements of emphysema in ultra-high resolution computed tomography using model-based iterative reconstruction in comparison to that using hybrid iterative reconstruction.. *Physical and Engineering Sciences in Medicine*, **2022**, 45, 115	7	0
36	Deep Learning Reconstruction Shows Better Lung Nodule Detection for Ultra-Low-Dose Chest CT.. *Radiology*, **2022**, 210551	20.5	4
35	Algorithm-Driven Advances for Scientific CT Instruments: From model-based to deep learning-based approaches. *IEEE Signal Processing Magazine*, **2022**, 39, 32-43	9.4	1
34	A CT image feature space (CTIS) loss for restoration with deep learning-based methods.. *Physics in Medicine and Biology*, **2022**,	3.8	1
33	A deep recurrent neural network with primal-dual optimization for CT metal artifact reduction. **2022**,		
32	Sparse-View CT Reconstruction using Recurrent Stacked Back Projection. **2021**,		
31	Review and Prospect: Artificial Intelligence in Advanced Medical Imaging. **2021**, 1,		6
30	Least-squares and maximum-likelihood in computed tomography.. *Journal of Medical Imaging*, **2022**, 9, 031508	2.6	
29	Model-Based Reconstruction for Collimated Beam Ultrasound Systems. **2022**,		

28	Phantom study of an in-house amplitude-gating respiratory method with silicon photomultiplier technology positron emission tomography/computed tomography. *Computer Methods and Programs in Biomedicine*, **2022**, 106907	6.9	
27	Continuous-to-Continuous Data Model vs. Discrete-to-Discrete Data Model for the Statistical Iterative Reconstruction Method. *Lecture Notes in Computer Science*, **2022**, 493-506	0.9	
26	An Integral-equation-oriented Vectorized SpMV Algorithm and its Application on CT Imaging Reconstruction. **2022**,		
25	Sparsity-based method for ring artifact elimination in computed tomography. *PLoS ONE*, **2022**, 17, e0268410	3.7	
24	Investigation on accelerated ordered subsets image reconstruction techniques with superiorization methodology. *European Physical Journal Plus*, **2022**, 137,	3.1	
23	The impact of vertical off-centering on image noise and breast dose in chest CT with organ-based tube current modulation: A phantom study. *Physica Medica*, **2022**, 100, 153-163	2.7	
22	A Review of Deep Learning CT Reconstruction: Concepts, Limitations, and Promise in Clinical Practice. *Current Radiology Reports*,	0.5	1
21	Sparse Regularized CT Reconstruction: An Optimization Perspective. **2022**, 1-34		0
20	An Original Continuous-to-Continuous Forward Model as a Universal Method for the Formulation of Reconstruction Methods for Medical Imaging Techniques. **2022**, 396-405		0
19	Iterative CT reconstruction based on ADMM using shearlet sparse regularization. **2022**, 19, 11840-11853		1
18	Physics of computed tomography scanning. **2022**, 159-165		0
17	A Methodology to Train a Convolutional Neural Network-Based Low-Dose CT Denoiser With an Accurate Image Domain Noise Insertion Technique. **2022**, 10, 86395-86407		0
16	Development of Image Reconstruction Algorithms for Few-View Computed Tomography at RFNC□VNIITF: History, State of the Art, and Prospects. **2022**, 58, 455-465		0
15	Knowledge Graph of Artificial Intelligence in Medicine: A Scientometric Analysis. **2022**,		0
14	Experimental validation of model-based digital holographic imaging using multi-shot data. **2022**,		0
13	Fused x-ray and fast neutron CT reconstruction for imaging large and dense objects. **2022**, 132, 154902		0
12	Implementations of statistical reconstruction algorithm for CT scanners with flying focal spot. **2022** ,		0
11	A Noise Preserving Sharpening Filter for CT Image Enhancement. **2022**,		0

10	Multi-Pose Fusion for Sparse-View CT Reconstruction Using Consensus Equilibrium. **2022**,	0
9	Comparison of supervised-learning approaches for designing a channelized observer for image quality assessment in CT.	0
8	Sparse-view Cone Beam CT Reconstruction using Data-consistent Supervised and Adversarial Learning from Scarce Training Data. **2023**, 1-17	0
7	Deep Learning Image Reconstruction for CT: Technical Principles and Clinical Prospects. **2023**, 306,	0
6	Sparse Regularized CT Reconstruction: An Optimization Perspective. **2023**, 551-584	0
5	TextureWGAN: texture preserving WGAN with multitask regularizer for computed tomography inverse problems. **2023**, 10,	0
4	Sparse-View Cone-Beam CT Reconstruction by Bar-by-Bar Neural FDK Algorithm. 1-23	0
3	Derivation of Coordinate Descent Algorithms from Optimal Control Theory. **2023**, 4,	0
2	Self-supervised denoising of projection data for low-dose cone-beam CT.	0
1	Implementation of AI image reconstruction in CT: How is it validated and what dose reductions can be achieved.	0