Norbert J Pelc

List of Publications by Year
in descending order

52 papers	2,733 citations	361413 20 h-index	233421 45 g-index
52 all docs	52 docs citations	52 times ranked	2727 citing authors

#	Article	IF	Citations
1	Photon-counting CT: Technical Principles and Clinical Prospects. Radiology, 2018, 289, 293-312.	7.3	645
2	Concomitant gradient terms in phase contrast MR: Analysis and correction. Magnetic Resonance in Medicine, 1998, 39, 300-308.	3.0	461
3	Unaliasing by Fourier-encoding the overlaps using the temporal dimension (UNFOLD), applied to cardiac imaging and fMRI. Magnetic Resonance in Medicine, 1999, 42, 813-828.	3.0	389
4	Reconstructions of phase contrast, phased array multicoil data. Magnetic Resonance in Medicine, 1994, 32, 330-334.	3.0	135
5	Three-Point Phase-Contrast Velocity Measurements with Increased Velocity-to-Noise Ratio. Magnetic Resonance in Medicine, 1995, 33, 122-126.	3.0	101
6	Recent and Future Directions in CT Imaging. Annals of Biomedical Engineering, 2014, 42, 260-268.	2.5	84
7	Magnetic resonance velocity imaging using a fast spiral phase contrast sequence. Magnetic Resonance in Medicine, 1994, 32, 476-483.	3.0	80
8	Gradient characterization using a Fourier-transform technique. Magnetic Resonance in Medicine, 1998, 39, 581-587.	3.0	80
9	SMASH and SENSE: Experimental and numerical comparisons. Magnetic Resonance in Medicine, 2001, 45, 1103-1111.	3.0	65
10	Filtered backprojection for modifying the impulse response of circular tomosynthesis. Medical Physics, 2001, 28, 372-380.	3.0	64
11	Fourier tracking of myocardial motion using cineâ€PC data. Magnetic Resonance in Medicine, 1996, 35, 471-480.	3.0	63
12	Sufficient Statistics as a Generalization of Binning in Spectral X-ray Imaging. IEEE Transactions on Medical Imaging, 2011, 30, 84-93.	8.9	55
13	Angiographic Imaging with 2D RF Pulses. Magnetic Resonance in Medicine, 1997, 37, 260-267.	3.0	49
14	To bin or not to bin? The effect of CT system limiting resolution on noise and detectability. Physics in Medicine and Biology, 2013, 58, 1433-1446.	3.0	47
15	Measurements of the Relationship Between CT Hounsfield Units and Acoustic Velocity and How It Changes With Photon Energy and Reconstruction Method. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1111-1124.	3.0	37
16	Artifacts and signal loss due to flow in the presence of Bo inhomogeneity. Magnetic Resonance in Medicine, 1996, 35, 126-130.	3.0	26
17	Spectral resolution and highâ€flux capability tradeoffs in CdTe detectors for clinical <scp>CT</scp>. Medical Physics, 2018, 45, 1433-1443.	3.0	26
18	Alignment of a volumetric tomography system. Medical Physics, 2001, 28, 1472-1481.	3.0	22

#	Article	IF	Citations
19	Detective quantum efficiency of photon-counting CdTe and Si detectors for computed tomography: a simulation study. Journal of Medical Imaging, 2020, 7, 1.	1.5	22
20	Dose reduction using a dynamic, piecewiseâ€linear attenuator. Medical Physics, 2014, 41, 021910.	3.0	21
21	Multisource inverse-geometry CT. Part II. X-ray source design and prototype. Medical Physics, 2016, 43, 4617-4627.	3.0	18
22	Accurate Image Domain Noise Insertion in CT Images. IEEE Transactions on Medical Imaging, 2020, 39, 1906-1916.	8.9	18
23	A reduced field-of-view method to increase temporal resolution or reduce scan time in cine MRI. Magnetic Resonance in Medicine, 2000, 43, 549-558.	3.0	17
24	Image quality comparison between single energy and dual energy CT protocols for hepatic imaging. Medical Physics, 2016, 43, 4877-4890.	3.0	16
25	Spectral Photon Counting CT: Imaging Algorithms and Performance Assessment. IEEE Transactions on Radiation and Plasma Medical Sciences, 2021, 5, 453-464.	3.7	15
26	Design, Performance, and Applications of a Hybrid X-Ray/MR System for Interventional Guidance. Proceedings of the IEEE, 2008, 96, 468-480.	21.3	13
27	Improving pulse detection in multibin photon-counting detectors. Journal of Medical Imaging, 2016, 3, 023505.	1.5	13
28	A Dynamic Attenuator Improves Spectral Imaging With Energy-Discriminating, Photon Counting Detectors. IEEE Transactions on Medical Imaging, 2015, 34, 729-739.	8.9	12
29	A limit on dose reduction possible with CT reconstruction algorithms without prior knowledge of the scan subject. Medical Physics, 2016, 43, 1361-1368.	3.0	12
30	A framework for performance characterization of energyâ€resolving photonâ€counting detectors. Medical Physics, 2018, 45, 4897-4915.	3.0	12
31	How CT happened: the early development of medical computed tomography. Journal of Medical Imaging, 2021, 8, 052110.	1.5	12
32	Segmented targeted least squares estimator for material decomposition in multibin photon-counting detectors. Journal of Medical Imaging, 2017, 4, 023503.	1.5	11
33	Acoustic Attenuation: Multifrequency Measurement and Relationship to CT and MR Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1532-1545.	3.0	11
34	Control algorithms for dynamic attenuators. Medical Physics, 2014, 41, 061907.	3.0	9
35	Fluid-filled dynamic bowtie filter: Description and comparison with other modulators. Medical Physics, 2019, 46, 127-139.	3.0	9
36	Detective efficiency of photon counting detectors with spectral degradation and crosstalk. Medical Physics, 2020, 47, 27-36.	3.0	9

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37	Findings of the AAPM Ad Hoc committee on magnetic resonance imaging in radiation therapy: Unmet needs, opportunities, and recommendations. Medical Physics, 2021, 48, 4523-4531.	3.0	9
38	Fourier rebinning algorithm for inverse geometry CT. Medical Physics, 2008, 35, 4857-4862.	3.0	7
39	Efficacy of fixed filtration for rapid kVpâ€switching dual energy xâ€ray systems. Medical Physics, 2014, 41, 031914.	3.0	7
40	Effect of Spectral Degradation and Spatio-Energy Correlation in X-Ray PCD for Imaging. IEEE Transactions on Medical Imaging, 2018, 37, 1910-1919.	8.9	7
41	A comparison of dual kV energy integrating and energy discriminating photon counting detectors for dual energy x-ray imaging. , 2012, , .		6
42	An algorithm to estimate the object support in truncated images. Medical Physics, 2014, 41, 071908.	3.0	6
43	T1-weighted signal contrast optimization by rf pulse sequences. Magnetic Resonance in Medicine, 1995, 34, 133-135.	3.0	2
44	Utilization of in-depth photon counting detectors towards x-ray spectral imaging: The benefits from the depth information. , 2014, , .		2
45	â€œConventionalâ€•CT images from spectral measurements. , 2016, , .		2
46	Special Section Guest Editorial: Positron Emission Tomography: History, Current Status, and Future Prospects. Journal of Medical Imaging, 2017, 4, 011001.	1.5	2
47	Simulation model for evaluating energy-resolving photon-counting CT detectors based on generalized linear-systems framework. , 2019, , .		2
48	Implementation of a piecewise-linear dynamic attenuator. Journal of Medical Imaging, 2019, 6, 1.	1.5	1
49	Special Section Guest Editorial: Computed tomography (CT) at 50 years. Journal of Medical Imaging, 2021, 8, 052101.	1.5	1
50	Reply to â€œComment on â€˜An inverse-geometry volumetric CT system with a large-area scanned source: A feasibility studyâ€™â€‰'' [Med. Phys. 32, 635 (2005)]. Medical Physics, 2005, 32, 636-636.	3.0	0
51	Implementation of the derivative back projection - finite Hilbert inverse algorithm in projection reconstruction MRI. , 2007, , .		0
52	A dynamic simulation framework for CT perfusion in stroke assessment built from first principles. Medical Physics, 2021, 48, 3500-3510.	3.0	0