Frederic Noo

List of Publications by Year
in descending order

46 papers	899 citations	1051969 10 h-index	651938 25 g-index
46 all docs	46 docs citations	46 times ranked	586 citing authors

#	Article	IF	Citations
1	Convex optimization algorithms in medical image reconstruction—in the age of AI. Physics in Medicine and Biology, 2022, 67, 07TR01.	1.6	6
2	Efficient gradient computation for optimization of hyperparameters. Physics in Medicine and Biology, 2022, 67, 03NT01.	1.6	1
3	Science and practice of imaging physics through 50 years of SPIE Medical Imaging conferences. Journal of Medical Imaging, 2022, 9, 012205.	0.8	2
4	Patient-specific hyperparameter learning for optimization-based CT image reconstruction. Physics in Medicine and Biology, 2021, 66, 19NT01.	1.6	4
5	A Robust Regularizer for Multiphase CT. IEEE Transactions on Medical Imaging, 2020, 39, 2327-2338.	5.4	2
6	The effects of physics-based data augmentation on the generalizability of deep neural networks: Demonstration on nodule false-positive reduction. Medical Physics, 2019, 46, 4563-4574.	1.6	12
7	Accelerating iterative coordinate descent using a stored system matrix. Medical Physics, 2019, 46, e801-e809.	1.6	6
8	Impact of the non-negativity constraint in model-based iterative reconstruction from CT data. Medical Physics, 2019, 46, e835-e854.	1.6	6
9	Adaptive smoothing algorithms for MBIR in CT applications. , 2019, , .		1
10	A Direct Algorithm for Optimization Problems With the Huber Penalty. IEEE Transactions on Medical Imaging, 2018, 37, 162-172.	5.4	4
11	Technical Note: Free<scp>CT</scp>_<scp>ICD</scp>: An open-source implementation of a model-based iterative reconstruction method using coordinate descent optimization for <scp>CT</scp> imaging investigations. Medical Physics, 2018, 45, 3591-3603.	1.6	4
12	The effect of radiation dose reduction on computer-aided detection (CAD) performance in a low-dose lung cancer screening population. Medical Physics, 2017, 44, 1337-1346.	1.6	14
13	A sequential solution for anisotropic total variation image denoising with interval constraints. Physics in Medicine and Biology, 2017, 62, N428-N435.	1.6	4
14	Effect of Using 2 mm Voxels on Observer Performance for PET Lesion Detection. IEEE Transactions on Nuclear Science, 2016, 63, 1359-1366.	1.2	11
15	A comparison of linear interpolation models for iterative CT reconstruction. Medical Physics, 2016, 43, 6455-6473.	1.6	15
16	Technical Note: FreeCT_wFBP: A robust, efficient, open-source implementation of weighted filtered backprojection for helical, fan-beam CT. Medical Physics, 2016, 43, 1411-1420.	1.6	31
17	New Theoretical Results on Channelized Hotelling Observer Performance Estimation With Known Difference of Class Means. IEEE Transactions on Nuclear Science, 2013, 60, 182-193.	1.2	10
18	Improved PET lesion-detection performance using 2mm pixels. , 2013, , .		0

#	Article	IF	Citations
19	Low dose perfusion CT. , 2012, , .		1
20	Confidence intervals for performance assessment of linear observers. Medical Physics, 2011, 38, S57-S68.	1.6	11
21	Line plus arc source trajectories and their R-line coverage for long-object cone-beam imaging with a C-arm system. Physics in Medicine and Biology, 2011, 56, 3447-3471.	1.6	9
22	Band-Restricted Estimation of Noise Variance in Filtered Backprojection Reconstructions Using Repeated Scans. IEEE Transactions on Medical Imaging, 2010, 29, 1097-1113.	5.4	4
23	Practical estimation of detectability maps for assessment of CT scanner performance. , 2010, , .		2
24	Comparing short scan CT reconstruction algorithms regarding cone-beam artifact performance. , 2010, , .		7
25	Estimation of trained-observer performance with known difference of class means. , 2010, , .		2
26	Avoiding the backprojection weight in short-scan CT reconstruction. , 2009, , .		1
27	Rapidly converging image covariance estimation for FBP reconstruction methods. , 2008, , .		2
28	Accurate helical CT reconstruction with redundant data using nutating slices. , 2008, , .		0
29	A new scheme for view-dependent data differentiation in fan-beam and cone-beam computed tomography. Physics in Medicine and Biology, 2007, 52, 5393-5414.	1.6	25
30	Evaluation of three analytical methods for reconstruction from cone-beam data on a short circular scan. , 2007, , .		4
31	Comparative evaluation of two analytical methods for Helical Cone-Beam Tomography. , 2007, , .		2
32	Constriction of cone-beam artifacts by the Z-smart reconstruction method. , 2007, , .		2
33	Evaluation of the impact of view differentiation and backprojection weight in circle-plus-line cone-beam tomography. , 2007, , .		0
34	Theory for image reconstruction from divergent-beam projections in SPECT. , 2006, , .		1
35	Image reconstruction from truncated data in SPECT with uniform attenuation. , 2006, , .		6
36	Resampling density values on R-lines into density values on a Cartesian grid. , 2006, , .		1

#	Article	IF	Citations
37	Calibration of the Circle-plus-Arc Trajectory. , 2006, , .		1
38	Factorization of the Reconstruction Problem in Circular Cone-Beam Tomography and its Use for Stability Analysis. , 2006, , .		0
39	Cone-Beam Tomography with Linearly Distorted Source Trajectories. , 2006, , .		1
40	Cone-beam Tomography from Short-Scan Circle-plus-Arc Data Measured on a C-arm System. , 2006, , .		5
41	General Reconstruction Theory for Multislice X-ray Computed Tomography With a Gantry Tilt. IEEE Transactions on Medical Imaging, 2004, 23, 1109-1116.	5.4	25
42	A two-step Hilbert transform method for 2D image reconstruction. Physics in Medicine and Biology, 2004, 49, 3903-3923.	1.6	296
43	Exact helical reconstruction using native cone-beam geometries. Physics in Medicine and Biology, 2003, 48, 3787-3818.	1.6	147
44	Image reconstruction from fan-beam projections on less than a short scan. Physics in Medicine and Biology, 2002, 47, 2525-2546.	1.6	206
45	Inversion of the 3D exponential x-ray transform for a half equatorial band and other semi-circular geometries. Physics in Medicine and Biology, 2002, 47, 2727-2735.	1.6	4
46	Single material beam hardening correction via an analytical energy response model for diagnostic CT. Medical Physics, 0, , .	1.6	1