Michael Sandborg

List of Publications by Year
in descending order

73 papers	1,457 citations	361045 20 h-index	344852 36 g-index
74 all docs	74 docs citations	74 times ranked	1218 citing authors

#	Article	IF	Citations
1	Microbeam radiation therapy. Medical Physics, 1992, 19, 1395-1400.	1.6	256
2	Influence of anode/filter material and tube potential on contrast, signal-to-noise ratio and average absorbed dose in mammography: a Monte Carlo study.. British Journal of Radiology, 2000, 73, 1056-1067.	1.0	146
3	Breast dosimetry using high-resolution voxel phantoms. Radiation Protection Dosimetry, 2005, 114, 359-363.	0.4	63
4	Evaluation of patient-absorbed doses during coronary angiography and intervention by femoral and radial artery access. European Radiology, 2004, 14, 653-658.	2.3	52
5	A Monte Carlo program for the calculation of contrast, noise and absorbed dose in diagnostic radiology. Computer Methods and Programs in Biomedicine, 1994, 42, 167-180.	2.6	48
6	Comparison of clinical and physical measures of image quality in chest and pelvis computed radiography at different tube voltages. Medical Physics, 2006, 33, 4169-4175.	1.6	46
7	Assessment of image quality in abdominal CT: potential dose reduction with model-based iterative reconstruction. European Radiology, 2018, 28, 2464-2473.	2.3	44
8	Evaluation of image quality of lumbar spine images: a comparison between FFE and VGA. Radiation Protection Dosimetry, 2005, 114, 53-61.	0.4	37
9	Demonstration of correlations between clinical and physical image quality measures in chest and lumbar spine screenâ€“film radiography. British Journal of Radiology, 2001, 74, 520-528.	1.0	36
10	Establishing the European diagnostic reference levels for interventional cardiology. Physica Medica, 2018, 54, 42-48.	0.4	32
11	Segmentation of bones in medical dual-energy computed tomography volumes using the 3D U-Net. Physica Medica, 2020, 69, 241-247.	0.4	31
12	Estimation of dose to the unborn child at diagnostic X-ray examinations based on data registered in RIS/PACS. European Radiology, 2007, 17, 205-209.	2.3	29
13	Monte Carlo study of grid performance in diagnostic radiology: factors which affect the selection of tube potential and grid ratio. British Journal of Radiology, 1993, 66, 1164-1176.	1.0	28
14	Influence of the characteristic curve on the clinical image quality of lumbar spine and chest radiographs. British Journal of Radiology, 2004, 77, 204-215.	1.0	26
15	Local skin and eye lens equivalent doses in interventional neuroradiology. European Radiology, 2010, 20, 725-733.	2.3	26
16	Selection of anti-scatter grids for different imaging tasks: the advantage of low atomic number cover and interspace materials. British Journal of Radiology, 1993, 66, 1151-1163.	1.0	25
17	Schemes for the optimization of chest radiography using a computer model of the patient and x-ray imaging system. Medical Physics, 2001, 28, 2007-2019.	1.6	25
18	How should low-contrast detail detectability be measured in fluoroscopy?. Medical Physics, 2004, 31, 2564-2576.	1.6	25

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19	Bedside monitoring of CBF with xenon-CT and a mobile scanner: a novel method in neurointensive care. British Journal of Neurosurgery, 2005, 19, 395-401.	0.4	24
20	Use of the concept of energy imparted in diagnostic radiology. Applied Radiation and Isotopes, 1999, 50, 39-62.	0.7	21
21	A study and optimization of lumbar spine X-ray imaging systems. British Journal of Radiology, 2003, 76, 177-188.	1.0	20
22	Effect of scatter on reconstructed image quality in cone beam computed tomography: evaluation of a scatter-reduction optimisation function. Radiation Protection Dosimetry, 2005, 114, 337-340.	0.4	20
23	Calculation of the properties of digital mammograms using a computer simulation. Radiation Protection Dosimetry, 2005, 114, 395-398.	0.4	20
24	Quantifying the potential for dose reduction with visual grading regression. British Journal of Radiology, 2013, 86, 31197714-31197714.	1.0	20
25	Shaping X-ray spectra with filters in X-ray diagnostics. Medical and Biological Engineering and Computing, 1994, 32, 384-390.	1.6	19
26	Impact of Center Experience on Patient Radiation Exposure During Transradial Coronary Angiography and Percutaneous Intervention: A Patientâ€Level, International, Collaborative, Multiâ€Center Analysis. Journal of the American Heart Association, 2016, 5, .	1.6	19
27	Monte Carlo study of grid performance in diagnostic radiology: task dependent optimization for screenâ€"film imaging. British Journal of Radiology, 1994, 67, 76-85.	1.0	18
28	CTmodâ€"A toolkit for Monte Carlo simulation of projections including scatter in computed tomography. Computer Methods and Programs in Biomedicine, 2008, 90, 167-178.	2.6	18
29	The physical performance of different X-ray contrast agents: calculations using a Monte Carlo model of the imaging chain. Physics in Medicine and Biology, 1995, 40, 1209-1224.	1.6	17
30	IMPLICATIONS OF PATIENT CENTRING ON ORGAN DOSE IN COMPUTED TOMOGRAPHY. Radiation Protection Dosimetry, 2016, 169, 130-135.	0.4	17
31	A Monte Carlo study of grid performance in diagnostic radiology: task-dependent optimization for digital imaging. Physics in Medicine and Biology, 1994, 39, 1659-1676.	1.6	15
32	Distributions of scatter-to-primary and signal-to-noise ratios per pixel in digital chest imaging. Radiation Protection Dosimetry, 2005, 114, 355-358.	0.4	15
33	The use of carbon fibre material in radiographic cassettes: estimation of the dose and contrast advantages.. British Journal of Radiology, 1997, 70, 383-390.	1.0	13
34	Application of adaptive non-linear 2D and 3D postprocessing filters for reduced dose abdominal CT. Acta Radiologica, 2012, 53, 335-342.	0.5	13
35	IMAGE QUALITY AND POTENTIAL DOSE REDUCTION USING ADVANCED MODELED ITERATIVE RECONSTRUCTION (ADMIRE) IN ABDOMINAL CT - A REVIEW. Radiation Protection Dosimetry, 2021, 195, 177-187.	0.4	13
36	A Voxel Phantom Based Monte Carlo Computer Program for Optimisation of Chest and Lumbar Spine X Ray Imaging Systems. Radiation Protection Dosimetry, 2000, 90, 105-108.	0.4	12

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37	A Monte Carlo-based model for simulation of digital chest tomosynthesis. Radiation Protection Dosimetry, 2010, 139, 159-163.	0.4	11
38	CLINICAL AUDIT OF IMAGE QUALITY IN RADIOLOGY USING VISUAL GRADING CHARACTERISTICS ANALYSIS. Radiation Protection Dosimetry, 2016, 169, 340-346.	0.4	11
39	A model-based iterative reconstruction algorithm DIRA using patient-specific tissue classification via DECT for improved quantitative CT in dose planning. Medical Physics, 2017, 44, 2345-2357.	1.6	11
40	Assessment of image quality in abdominal computed tomography: Effect of model-based iterative reconstruction, multi-planar reconstruction and slice thickness on potential dose reduction. European Journal of Radiology, 2020, 122, 108703.	1.2	11
41	Quantifying the potential for dose reduction with visual grading regression. British Journal of Radiology, 2012, 86, 20110784-20110784.	1.0	10
42	Comparison of Model Predictions of Image Quality with Results of Clinical Trials in Chest and Lumbar Spine Screen-film Imaging. Radiation Protection Dosimetry, 2000, 90, 173-176.	0.4	9
43	Echo-guided presentation of the aortic valve minimises contrast exposure in transcatheter valve recipients. Catheterization and Cardiovascular Interventions, 2011, 77, 272-275.	0.7	9
44	AUTOMATIC SEGMENTATION OF PELVIS FOR BRACHYTHERAPY OF PROSTATE. Radiation Protection Dosimetry, 2016, 169, 398-404.	0.4	9
45	Patient Organ Radiation Doses During Treatment for Aneurysmal Subarachnoid Hemorrhage. Clinical Neuroradiology, 2012, 22, 315-325.	1.0	8
46	Influence of scattered radiation and tube potential on radiographic contrast: comparison of two different dental X-ray films.. Dentomaxillofacial Radiology, 1991, 20, 135-146.	1.3	7
47	Comparison of Different Materials for Test Phantoms in Diagnostic Radiology. Radiation Protection Dosimetry, 1993, 49, 345-347.	0.4	7
48	Inter-observer variation in masked and unmasked images for quality evaluation of clinical radiographs. Radiation Protection Dosimetry, 2005, 114, 62-68.	0.4	7
49	VERIFICATION OF INDICATED SKIN ENTRANCE AIR KERMA FOR CARDIAC X-RAY-GUIDED INTERVENTION USING GAFCHROMIC FILM. Radiation Protection Dosimetry, 2016, 169, 245-248.	0.4	7
50	Image quality and pathology assessment in CT Urography: when is the low-dose series sufficient?. BMC Medical Imaging, 2019, 19, 64.	1.4	7
51	The influence of patient thickness and imaging system on patient dose and physical image quality in digital chest imaging. Radiation Protection Dosimetry, 2005, 114, 294-297.	0.4	5
52	Efficient quality assurance programs in radiology and nuclear medicine in Ostergotland, Sweden. Radiation Protection Dosimetry, 2010, 139, 410-417.	0.4	5
53	ACCURATE KAP METER CALIBRATION AS A PREREQUISITE FOR OPTIMISATION IN PROJECTION RADIOGRAPHY. Radiation Protection Dosimetry, 2016, 169, 353-359.	0.4	5
54	Comparison between lucite and water as a phantom material in medical radiology. Progress in Nuclear Energy, 1990, 24, 355-364.	1.3	4

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55	Optimising the Imaging Conditions in Paediatric Fluoroscopy. Radiation Protection Dosimetry, 2000, 90, 211-216.	0.4	3
56	Optimisation of quantitative lung SPECT applied to mild COPD: a software phantom simulation study. EJNMMI Research, 2015, 5, 16.	1.1	3
57	The Optimisation of Lumbar Spine AP Radiography Using a Realistic Computer Model. Radiation Protection Dosimetry, 2000, 90, 207-210.	0.4	2
58	PARALLELISATION OF THE MODEL-BASED ITERATIVE RECONSTRUCTION ALGORITHM DIRA. Radiation Protection Dosimetry, 2016, 169, 405-409.	0.4	2
59	DIRA-3Dâ€"a model-based iterative algorithm for accurate dual-energy dual-source 3D helical CT. Biomedical Physics and Engineering Express, 2019, 5, 065005.	0.6	2
60	SEMI-AUTOMATED 3D SEGMENTATION OF PELVIC REGION BONES IN CT VOLUMES FOR THE ANNOTATION OF MACHINE LEARNING DATASETS. Radiation Protection Dosimetry, 2021, 195, 172-176.	0.4	2
61	OPTIMAL SELECTION OF BASE MATERIALS FOR ACCURATE DUAL-ENERGY COMPUTED TOMOGRAPHY: COMPARISON BETWEEN THE ALVAREZâ€"MACOVSKI METHOD AND DIRA. Radiation Protection Dosimetry, 2021, 195, 218-224.	0.4	2
62	Monte Carlo simulation of a mammographic test phantom. Radiation Protection Dosimetry, 2005, 114, 432-435.	0.4	1
63	Optimizing two radioluminescence based quality assurance devices for diagnostic radiology utilizing a simple model. , 2014, , .		1
64	ASSESSING THE USEFULNESS OF THE QUASI-IDEAL OBSERVER FOR QUALITY CONTROL IN FLUOROSCOPY. Radiation Protection Dosimetry, 2016, 169, 360-364.	0.4	1
65	EP-2082: The effect of zinc in prostatic calculi on the accuracy of the MBIR algorithm DIRA. Radiotherapy and Oncology, 2018, 127, S1142-S1143.	0.3	1
66	An audit of high dose-rate prostate brachytherapy treatment planning at six Swedish clinics. Journal of Contemporary Brachytherapy, 2021, 13, 59-71.	0.4	1
67	Signal-To-Noise Ratio Rate Measurement in Fluoroscopy For Quality Control and Teaching Good Radiological Imaging Technique. Radiation Protection Dosimetry, 2021, 195, 407-415.	0.4	1
68	Measurement of Skin Dose and Radiation-Induced Changes in Skin Microcirculation in Chronic Total Occlusion Percutaneous Cardiac Interventions (Cto-Pci). Radiation Protection Dosimetry, 2021, 195, 257-263.	0.4	1
69	Development and assessment of a quality assurance device for radiation fieldâ€"light field congruence testing in diagnostic radiology. Journal of Medical Imaging, 2020, 7, 063501.	0.8	1
70	Does Radiological Protection Training or a Real-Time Staff Dosemeter Display Reduce Staff Doses During X-Ray-Guided Pulmonary Bronchoscopy?. Radiation Protection Dosimetry, 2022, , .	0.4	1
71	ACCURACY OF CT NUMBERS OBTAINED BY DIRA AND MONOENERGETIC PLUS ALGORITHMS IN DUAL-ENERGY COMPUTED TOMOGRAPHY. Radiation Protection Dosimetry, 2021, 195, 212-217.	0.4	0
72	Results from an Optimisation of Grid Design in Diagnostic Radiology. Radiation Protection Dosimetry, 1995, 57, 211-215.	0.4	0

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73	Occupational doses in interventional angiography after radiological protection training and use of a real-time direct display dosimeter. Journal of Radiological Protection, 0, , .	0.6	0