

Francis R Verdun

List of Publications by Year in descending order

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68
papers

2,083
citations

218381

26
h-index

243296

44
g-index

68
all docs

68
docs citations

68
times ranked

2001
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of task-based image quality for abdominal CT protocols linked with national diagnostic reference levels. <i>European Radiology</i> , 2022, 32, 1227-1237.	2.3	4
2	ANNUAL EXPOSURE OF THE SWISS POPULATION FROM MEDICAL IMAGING IN 2018. <i>Radiation Protection Dosimetry</i> , 2021, 195, 289-295.	0.4	11
3	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. <i>Physica Medica</i> , 2020, 76, 28-37.	0.4	82
4	Establishment of national diagnostic reference levels in dental cone beam computed tomography in Switzerland. <i>Dentomaxillofacial Radiology</i> , 2020, 49, 20190468.	1.3	13
5	Phantom-based image quality assessment of clinical 18F-FDG protocols in digital PET/CT and comparison to conventional PMT-based PET/CT. <i>EJNMMI Physics</i> , 2020, 7, 1.	1.3	63
6	Search of low-contrast liver lesions in abdominal CT: the importance of scrolling behavior. <i>Journal of Medical Imaging</i> , 2020, 7, 1.	0.8	3
7	In vitro optimization and comparison of CT angiography versus radial cardiovascular magnetic resonance for the quantification of cross-sectional areas and coronary endothelial function. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2019, 21, 11.	1.6	3
8	Channelized Hotelling observer correlation with human observers for low-contrast detection in liver CT images. <i>Journal of Medical Imaging</i> , 2019, 6, 1.	0.8	4
9	The use of out-of-plane high Z patient shielding for fetal dose reduction in computed tomography: Literature review and comparison with Monte-Carlo calculations of an alternative optimisation technique. <i>Physica Medica</i> , 2018, 48, 156-161.	0.4	15
10	Effects of various generations of iterative CT reconstruction algorithms on low-contrast detectability as a function of the effective abdominal diameter: A quantitative task-based phantom study. <i>Physica Medica</i> , 2018, 48, 111-118.	0.4	30
11	Task-Based Model Observer Assessment of A Partial Model-Based Iterative Reconstruction Algorithm in Thoracic Oncologic Multidetector CT. <i>Scientific Reports</i> , 2018, 8, 17734.	1.6	24
12	Task-based quantification of image quality using a model observer in abdominal CT: a multicentre study. <i>European Radiology</i> , 2018, 28, 5203-5210.	2.3	15
13	Assessment of low contrast detection in CT using model observers: Developing a clinically-relevant tool for characterising adaptive statistical and model-based iterative reconstruction. <i>Zeitschrift Fur Medizinische Physik</i> , 2017, 27, 86-97.	0.6	7
14	Characterization of a CT unit for the detection of low contrast structures. , 2017, , .		1
15	Objective comparison of high-contrast spatial resolution and low-contrast detectability for various clinical protocols on multiple CT scanners. <i>Medical Physics</i> , 2017, 44, e153-e163.	1.6	14
16	Low contrast detection in abdominal CT: comparing single-slice and multi-slice tasks. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
17	Phantom Validation of Tc-99m Absolute Quantification in a SPECT/CT Commercial Device. <i>Computational and Mathematical Methods in Medicine</i> , 2016, 2016, 1-6.	0.7	40
18	Radiation Exposure of the Operator During Coronary Interventions (from the RADIO Study). <i>American Journal of Cardiology</i> , 2016, 118, 188-194.	0.7	19

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19	Impact of large x-ray beam collimation on image quality. , 2016, , .		0
20	EXPOSURE OF THE SWISS POPULATION BY RADIODIAGNOSTICS: 2013 REVIEW. Radiation Protection Dosimetry, 2016, 169, 221-224.	0.4	25
21	PATIENT EXPOSURE OPTIMISATION THROUGH TASK-BASED ASSESSMENT OF A NEW MODEL-BASED ITERATIVE RECONSTRUCTION TECHNIQUE. Radiation Protection Dosimetry, 2016, 169, 68-72.	0.4	9
22	BENCHMARKING OF CT FOR PATIENT EXPOSURE OPTIMISATION. Radiation Protection Dosimetry, 2016, 169, 78-83.	0.4	1
23	Objective assessment of low contrast detectability in computed tomography with Channelized Hotelling Observer. Physica Medica, 2016, 32, 76-83.	0.4	40
24	SYSTEM UPGRADE ON PHILIPS ALLURA FD20 ANGIOGRAPHY SYSTEMS: EFFECTS ON PATIENT SKIN DOSE AND STATIC IMAGE QUALITY. Radiation Protection Dosimetry, 2016, 169, 313-318.	0.4	6
25	OBJECTIVE TASK-BASED ASSESSMENT OF LOW-CONTRAST DETECTABILITY IN ITERATIVE RECONSTRUCTION. Radiation Protection Dosimetry, 2016, 169, 73-77.	0.4	8
26	PATIENT DOSE ASSESSMENT AFTER INTERVENTIONAL CARDIOLOGY PROCEDURES: A MULTI-CENTRIC APPROACH TO TRIGGER OPTIMISATION. Radiation Protection Dosimetry, 2016, 169, 249-252.	0.4	3
27	Medical physicists' implication in radiological diagnostic procedures: results after 1 y of experience. Radiation Protection Dosimetry, 2015, 164, 120-125.	0.4	2
28	Dual-Energy CT: Basic Principles, Technical Approaches, and Applications in Musculoskeletal Imaging (Part 2). Seminars in Musculoskeletal Radiology, 2015, 19, 438-445.	0.4	42
29	Optimization of Radiation Dose and Image Quality in Musculoskeletal CT: Emphasis on Iterative Reconstruction Techniques (Part 2). Seminars in Musculoskeletal Radiology, 2015, 19, 422-430.	0.4	18
30	Optimization of Radiation Dose and Image Quality in Musculoskeletal CT: Emphasis on Iterative Reconstruction Techniques (Part 1). Seminars in Musculoskeletal Radiology, 2015, 19, 415-421.	0.4	18
31	Low contrast detectability in CT for human and model observers in multi-slice data sets. Proceedings of SPIE, 2015, , .	0.8	0
32	Dual-Energy CT: Basic Principles, Technical Approaches, and Applications in Musculoskeletal Imaging (Part 1). Seminars in Musculoskeletal Radiology, 2015, 19, 431-437.	0.4	61
33	Eye-tracking of nodule detection in lung CT volumetric data. Medical Physics, 2015, 42, 2925-2932.	1.6	16
34	Low-dose multidetector computed tomography of the cervical spine: optimization of iterative reconstruction strength levels. Acta Radiologica, 2014, 55, 335-344.	0.5	25
35	MDCT Arthrography of the Hip: Value of the Adaptive Statistical Iterative Reconstruction Technique and Potential for Radiation Dose Reduction. American Journal of Roentgenology, 2014, 203, W665-W673.	1.0	10
36	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, 4047-4064.	1.6	47

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37	Model-based iterative reconstruction in pediatric chest CT: assessment of image quality in a prospective study of children with cystic fibrosis. <i>Pediatric Radiology</i> , 2013, 43, 558-567.	1.1	75
38	Computed tomography of the cervical spine: comparison of image quality between a standard-dose and a low-dose protocol using filtered back-projection and iterative reconstruction. <i>Skeletal Radiology</i> , 2013, 42, 937-945.	1.2	51
39	Radiation Dose Management in Pediatric CT. <i>Current Radiology Reports</i> , 2013, 1, 23-29.	0.4	1
40	Exposure of the Swiss population to computed tomography. <i>BMC Medical Imaging</i> , 2013, 13, 22.	1.4	20
41	Iterative reconstruction methods in two different MDCT scanners: Physical metrics and 4-alternative forced-choice detectability experiments – A phantom approach. <i>Physica Medica</i> , 2013, 29, 99-110.	0.4	167
42	Swiss Population Exposure to Radiation by Interventional Radiology in 2008. <i>Health Physics</i> , 2012, 103, 317-321.	0.3	5
43	EXPOSURE OF THE SWISS POPULATION BY MEDICAL X-RAYS. <i>Health Physics</i> , 2012, 102, 263-270.	0.3	38
44	Paediatric cardiac CT examinations: impact of the iterative reconstruction method ASIR on image quality – preliminary findings. <i>Pediatric Radiology</i> , 2011, 41, 1154-1164.	1.1	65
45	Potential benefit of the CT adaptive statistical iterative reconstruction method for pediatric cardiac diagnosis. <i>Proceedings of SPIE</i> , 2010, , .	0.8	5
46	Evaluation of a low-dose CT protocol with oral contrast for assessment of acute appendicitis. <i>European Radiology</i> , 2009, 19, 446-454.	2.3	41
47	CT radiation dose in children: a survey to establish age-based diagnostic reference levels in Switzerland. <i>European Radiology</i> , 2008, 18, 1980-1986.	2.3	149
48	Mammographic texture synthesis: second-generation clustered lumpy backgrounds using a genetic algorithm. <i>Optics Express</i> , 2008, 16, 7595.	1.7	37
49	Quality Initiatives Radiation Risk: What You Should Know to Tell Your Patient. <i>Radiographics</i> , 2008, 28, 1807-1816.	1.4	110
50	Effect of X-ray Tube Parameters, Iodine Concentration, and Patient Size on Image Quality in Pulmonary Computed Tomography Angiography: A Chest-Phantom-Study. <i>Investigative Radiology</i> , 2008, 43, 374-381.	3.5	80
51	Human linear template with mammographic backgrounds estimated with a genetic algorithm. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2007, 24, B1.	0.8	14
52	Semiautomatic Mammographic Parenchymal Patterns Classification Using Multiple Statistical Features. <i>Academic Radiology</i> , 2007, 14, 1486-1499.	1.3	30
53	CT Dose Optimization When Changing to CT Multi-Detector Row Technology. <i>Current Problems in Diagnostic Radiology</i> , 2007, 36, 176-184.	0.6	16
54	Abdominal plain film in patients admitted with clinical suspicion of renal colic: Should it be replaced by low-dose computed tomography?. <i>Urology</i> , 2006, 67, 64-68.	0.5	20

#	ARTICLE	IF	CITATIONS
55	Detection of liver metastases under 2Âcm: comparison of different acquisition protocols in four row multidetector-CT (MDCT). <i>European Radiology</i> , 2005, 15, 1881-1887.	2.3	46
56	Objective assessment of image quality in conventional and digital mammography taking into account dynamic range. <i>Radiation Protection Dosimetry</i> , 2005, 114, 380-382.	0.4	2
57	Nodule detection in digital chest radiography: part of image background acting as pure noise. <i>Radiation Protection Dosimetry</i> , 2005, 114, 102-108.	0.4	45
58	A new test phantom with different breast tissue compositions for image quality assessment in conventional and digital mammography. <i>Physics in Medicine and Biology</i> , 2004, 49, 5267-5281.	1.6	18
59	Management of patient dose and image noise in routine pediatric CT abdominal examinations. <i>European Radiology</i> , 2004, 14, 835-841.	2.3	52
60	Influence of scatter reduction method and monochromatic beams on image quality and dose in mammography. <i>Medical Physics</i> , 2003, 30, 3156-3164.	1.6	3
61	Detection of Low-Contrast Objects: Experimental Comparison of Singleâ€ and Multiâ€Detector Row CT with a Phantom. <i>Radiology</i> , 2002, 223, 426-431.	3.6	51
62	Objective comparison of image quality and dose between conventional and synchrotron radiation mammography. <i>Physics in Medicine and Biology</i> , 2000, 45, 3509-3523.	1.6	34
63	Estimation of the noisy component of anatomical backgrounds. <i>Medical Physics</i> , 1999, 26, 1365-1370.	1.6	138
64	<title>Importance of anatomical noise in mammography</title>. , 1997, , .		20
65	<title>Detectability of radiological images: the influence of anatomical noise</title>. , 1995, 2436, 156.		18
66	Fourier transforms of digital (discrete) waveforms. , 1990, , 69-93.		0
67	Beating the Nyquist Limit by Means of Interleaved Alternated Delay Sampling: Extension of Lower Mass Limit in Direct-Mode Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Applied Spectroscopy</i> , 1988, 42, 199-203.	1.2	12
68	Effects of Noise, Time-Domain Damping, Zero-Filling and the FFT Algorithm on the â€Exactâ€ Interpolation of Fast Fourier Transform Spectra. <i>Applied Spectroscopy</i> , 1988, 42, 715-721.	1.2	41