Jeffrey H Siewerdsen

List of Publications by Citations

267 papers	9,548 citations	50 h-index	91 g-index
291 ext. papers	10,923 ext. citations	3.7 avg, IF	6.15 L-index

#	Paper	IF	Citations
267	Flat-panel cone-beam computed tomography for image-guided radiation therapy. *International Journal of Radiation Oncology Biology Physics*, **2002**, 53, 1337-49	4	1003
266	Cone-beam computed tomography with a flat-panel imager: magnitude and effects of x-ray scatter. *Medical Physics*, **2001**, 28, 220-31	4.4	414
265	Cone-beam computed tomography with a flat-panel imager: initial performance characterization. *Medical Physics*, **2000**, 27, 1311-23	4.4	373
264	Evaluation of sparse-view reconstruction from flat-panel-detector cone-beam CT. *Physics in Medicine and Biology*, **2010**, 55, 6575-99	3.8	245
263	Volume CT with a flat-panel detector on a mobile, isocentric C-arm: pre-clinical investigation in guidance of minimally invasive surgery. *Medical Physics*, **2005**, 32, 241-54	4.4	230
262	A simple, direct method for x-ray scatter estimation and correction in digital radiography and cone-beam CT. *Medical Physics*, **2006**, 33, 187-97	4.4	206
261	Spektr: a computational tool for x-ray spectral analysis and imaging system optimization. *Medical Physics*, **2004**, 31, 3057-67	4.4	199
260	Cone-beam-CT guided radiation therapy: technical implementation. *Radiotherapy and Oncology*, **2005**, 75, 279-86	5.3	193
259	Technical aspects of dental CBCT: state of the art. *Dentomaxillofacial Radiology*, **2015**, 44, 20140224	3.9	182
258	Accurate technique for complete geometric calibration of cone-beam computed tomography systems. *Medical Physics*, **2005**, 32, 968-83	4.4	182
257	Empirical and theoretical investigation of the noise performance of indirect detection, active matrix flat-panel imagers (AMFPIs) for diagnostic radiology. *Medical Physics*, **1997**, 24, 71-89	4.4	179
256	High resolution gel-dosimetry by optical-CT and MR scanning. *Medical Physics*, **2001**, 28, 1436-45	4.4	159
255	A ghost story: spatio-temporal response characteristics of an indirect-detection flat-panel imager. *Medical Physics*, **1999**, 26, 1624-41	4.4	159
254	Intraoperative cone-beam CT for guidance of head and neck surgery: Assessment of dose and image quality using a C-arm prototype. *Medical Physics*, **2006**, 33, 3767-80	4.4	156
253	The influence of antiscatter grids on soft-tissue detectability in cone-beam computed tomography with flat-panel detectors. *Medical Physics*, **2004**, 31, 3506-20	4.4	156
252	Signal, noise power spectrum, and detective quantum efficiency of indirect-detection flat-panel imagers for diagnostic radiology. *Medical Physics*, **1998**, 25, 614-28	4.4	156
251	Optimization of x-ray imaging geometry (with specific application to flat-panel cone-beam computed tomography). *Medical Physics*, **2000**, 27, 1903-14	4.4	150

250	Dedicated cone-beam CT system for extremity imaging. *Radiology*, **2014**, 270, 816-24	20.5	140
249	A framework for noise-power spectrum analysis of multidimensional images. *Medical Physics*, **2002**, 29, 2655-71	4.4	133
248	The influence of bowtie filtration on cone-beam CT image quality. *Medical Physics*, **2009**, 36, 22-32	4.4	130
247	Characterization of scattered radiation in kV CBCT images using Monte Carlo simulations. *Medical Physics*, **2006**, 33, 4320-9	4.4	129
246	Technical Note: spektr 3.0-A computational tool for x-ray spectrum modeling and analysis. *Medical Physics*, **2016**, 43, 4711	4.4	109
245	Strategies to improve the signal and noise performance of active matrix, flat-panel imagers for diagnostic x-ray applications. *Medical Physics*, **2000**, 27, 289-306	4.4	108
244	A dedicated cone-beam CT system for musculoskeletal extremities imaging: design, optimization, and initial performance characterization. *Medical Physics*, **2011**, 38, 4700-13	4.4	105
243	Cone-beam computed tomography with a flat-panel imager: effects of image lag. *Medical Physics*, **1999**, 26, 2635-47	4.4	104
242	A simple approach to measure computed tomography (CT) modulation transfer function (MTF) and noise-power spectrum (NPS) using the American College of Radiology (ACR) accreditation phantom. *Medical Physics*, **2013**, 40, 051907	4.4	102
241	Cascaded systems analysis of the 3D noise transfer characteristics of flat-panel cone-beam CT. *Medical Physics*, **2008**, 35, 5510-29	4.4	91
240	Mobile C-arm cone-beam CT for guidance of spine surgery: image quality, radiation dose, and integration with interventional guidance. *Medical Physics*, **2011**, 38, 4563-74	4.4	90
239	Generalized DQE analysis of radiographic and dual-energy imaging using flat-panel detectors. *Medical Physics*, **2005**, 32, 1397-413	4.4	87
238	Anatomical background and generalized detectability in tomosynthesis and cone-beam CT. *Medical Physics*, **2010**, 37, 1948-65	4.4	84
237	Analysis of Fourier-domain task-based detectability index in tomosynthesis and cone-beam CT in relation to human observer performance. *Medical Physics*, **2011**, 38, 1754-68	4.4	81
236	Monte Carlo study of the effects of system geometry and antiscatter grids on cone-beam CT scatter distributions. *Medical Physics*, **2013**, 40, 051915	4.4	77
235	Initial performance evaluation of an indirect-detection, active matrix flat-panel imager (AMFPI) prototype for megavoltage imaging. *International Journal of Radiation Oncology Biology Physics*, **1998**, 42, 437-54	4	74
234	Optimization of dual-energy imaging systems using generalized NEQ and imaging task. *Medical Physics*, **2007**, 34, 127-39	4.4	73
233	Compensators for dose and scatter management in cone-beam computed tomography. *Medical Physics*, **2007**, 34, 2691-703	4.4	71

232	Investigation of C-arm cone-beam CT-guided surgery of the frontal recess. *Laryngoscope*, **2005**, 115, 2138-43	3.4	70
231	Demons deformable registration for CBCT-guided procedures in the head and neck: convergence and accuracy. *Medical Physics*, **2009**, 36, 4755-64	4.4	69
230	Intraoperative cone-beam CT for guidance of temporal bone surgery. *Otolaryngology - Head and Neck Surgery*, **2006**, 134, 801-8	5.5	68
229	Demons deformable registration of CT and cone-beam CT using an iterative intensity matching approach. *Medical Physics*, **2011**, 38, 1785-98	4.4	64
228	Cascaded systems analysis of noise reduction algorithms in dual-energy imaging. *Medical Physics*, **2008**, 35, 586-601	4.4	64
227	3D Rapid Prototyping for Otolaryngology-Head and Neck Surgery: Applications in Image-Guidance, Surgical Simulation and Patient-Specific Modeling. *PLoS ONE*, **2015**, 10, e0136370	3.7	60
226	Comparison of model and human observer performance for detection and discrimination tasks using dual-energy x-ray images. *Medical Physics*, **2008**, 35, 5043-53	4.4	59
225	Geometric calibration of a mobile C-arm for intraoperative cone-beam CT. *Medical Physics*, **2008**, 35, 2124-36	4.4	58
224	Task-based detectability in CT image reconstruction by filtered backprojection and penalized likelihood estimation. *Medical Physics*, **2014**, 41, 081902	4.4	55
223	Assessment of image quality in soft tissue and bone visualization tasks for a dedicated extremity cone-beam CT system. *European Radiology*, **2015**, 25, 1742-51	8	54
222	High-fidelity artifact correction for cone-beam CT imaging of the brain. *Physics in Medicine and Biology*, **2015**, 60, 1415-39	3.8	54
221	Automatic localization of vertebral levels in x-ray fluoroscopy using 3D-2D registration: a tool to reduce wrong-site surgery. *Physics in Medicine and Biology*, **2012**, 57, 5485-508	3.8	52
220	3D-2D image registration for target localization in spine surgery: investigation of similarity metrics providing robustness to content mismatch. *Physics in Medicine and Biology*, **2016**, 61, 3009-25	3.8	52
219	Model-based tomographic reconstruction of objects containing known components. *IEEE Transactions on Medical Imaging*, **2012**, 31, 1837-48	11.7	51
218	Robust 3D-2D image registration: application to spine interventions and vertebral labeling in the presence of anatomical deformation. *Physics in Medicine and Biology*, **2013**, 58, 8535-53	3.8	50
217	Soft-tissue imaging with C-arm cone-beam CT using statistical reconstruction. *Physics in Medicine and Biology*, **2014**, 59, 1005-26	3.8	49
216	Technical assessment of a cone-beam CT scanner for otolaryngology imaging: image quality, dose, and technique protocols. *Medical Physics*, **2012**, 39, 4932-42	4.4	43
215	Optimization of image acquisition techniques for dual-energy imaging of the chest. *Medical Physics*, **2007**, 34, 3904-15	4.4	43

214	Image quality and localization accuracy in C-arm tomosynthesis-guided head and neck surgery. *Medical Physics*, **2007**, 34, 4664-77	4.4	43
213	Extra-dimensional Demons: a method for incorporating missing tissue in deformable image registration. *Medical Physics*, **2012**, 39, 5718-31	4.4	42
212	Motion compensation in extremity cone-beam CT using a penalized image sharpness criterion. *Physics in Medicine and Biology*, **2017**, 62, 3712-3734	3.8	41
211	Extremity cone-beam CT for evaluation of medial tibiofemoral osteoarthritis: Initial experience in imaging of the weight-bearing and non-weight-bearing knee. *European Journal of Radiology*, **2015**, 84, 2564-70	4.7	41
210	Task-based modeling and optimization of a cone-beam CT scanner for musculoskeletal imaging. *Medical Physics*, **2011**, 38, 5612-29	4.4	41
209	Cone-Beam CT with a Flat-Panel Detector: From Image Science to Image-Guided Surgery. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 648, S241-S250	1.2	41
208	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
207	Self-calibration of cone-beam CT geometry using 3D-2D image registration. *Physics in Medicine and Biology*, **2016**, 61, 2613-32	3.8	39
206	Cascaded systems analysis of photon counting detectors. *Medical Physics*, **2014**, 41, 101907	4.4	38
205	An empirical method for lag correction in cone-beam CT. *Medical Physics*, **2008**, 35, 5187-96	4.4	38
204	Intraoperative cone-beam CT for head and neck surgery: feasibility of clinical implementation using a prototype mobile C-arm. *Head and Neck*, **2013**, 35, 959-67	4.2	36
203	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
202	Evaluation of a system for high-accuracy 3D image-based registration of endoscopic video to C-arm cone-beam CT for image-guided skull base surgery. *IEEE Transactions on Medical Imaging*, **2013**, 32, 1215-26	11.7	34
201	Noise aliasing and the 3D NEQ of flat-panel cone-beam CT: effect of 2D/3D apertures and sampling. *Medical Physics*, **2009**, 36, 3830-43	4.4	34
200	Investigation of lung nodule detectability in low-dose 320-slice computed tomography. *Medical Physics*, **2009**, 36, 1700-10	4.4	33
199	Beyond noise power in 3D computed tomography: the local NPS and off-diagonal elements of the Fourier domain covariance matrix. *Medical Physics*, **2012**, 39, 3240-52	4.4	33
198	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
197	Antiscatter grids in mobile C-arm cone-beam CT: effect on image quality and dose. *Medical Physics*, **2012**, 39, 153-9	4.4	32

196	3D-2D registration for surgical guidance: effect of projection view angles on registration accuracy. *Physics in Medicine and Biology*, **2014**, 59, 271-87	3.8	31
195	Intraoperative cone-beam CT for image-guided tibial plateau fracture reduction. *Computer Aided Surgery*, **2007**, 12, 195-207		31
194	TREK: an integrated system architecture for intraoperative cone-beam CT-guided surgery. *International Journal of Computer Assisted Radiology and Surgery*, **2012**, 7, 159-73	3.9	30
193	Cascaded systems analysis of noise and detectability in dual-energy cone-beam CT. *Medical Physics*, **2012**, 39, 5145-56	4.4	28
192	Accelerated statistical reconstruction for C-arm cone-beam CT using Nesterov's method. *Medical Physics*, **2015**, 42, 2699-708	4.4	27
191	Known-component 3D-2D registration for quality assurance of spine surgery pedicle screw placement. *Physics in Medicine and Biology*, **2015**, 60, 8007-24	3.8	27
190	Intraoperative cone-beam CT for correction of periaxial malrotation of the femoral shaft: a surface-matching approach. *Medical Physics*, **2007**, 34, 1380-7	4.4	27
189	MIND Demons: Symmetric Diffeomorphic Deformable Registration of MR and CT for Image-Guided Spine Surgery. *IEEE Transactions on Medical Imaging*, **2016**, 35, 2413-2424	11.7	27
188	3D–2D registration in mobile radiographs: algorithm development and preliminary clinical evaluation. *Physics in Medicine and Biology*, **2015**, 60, 2075-90	3.8	26
187	Deformable registration of the inflated and deflated lung in cone-beam CT-guided thoracic surgery: initial investigation of a combined model- and image-driven approach. *Medical Physics*, **2013**, 40, 017501	4.4	26
186	Soft-tissue detectability in cone-beam CT: evaluation by 2AFC tests in relation to physical performance metrics. *Medical Physics*, **2007**, 34, 4459-71	4.4	26
185	Spinal pedicle screw planning using deformable atlas registration. *Physics in Medicine and Biology*, **2017**, 62, 2871-2891	3.8	25
184	Noise, sampling, and the number of projections in cone-beam CT with a flat-panel detector. *Medical Physics*, **2014**, 41, 061909	4.4	25
183	Real-time tracking and virtual endoscopy in cone-beam CT-guided surgery of the sinuses and skull base in a cadaver model. *International Forum of Allergy and Rhinology*, **2011**, 1, 70-7	6.3	25
182	Automatic image-to-world registration based on x-ray projections in cone-beam CT-guided interventions. *Medical Physics*, **2009**, 36, 1800-12	4.4	25
181	An innovative phantom for quantitative and qualitative investigation of advanced x-ray imaging technologies. *Physics in Medicine and Biology*, **2005**, 50, N287-97	3.8	24
180	Automatic localization of target vertebrae in spine surgery: clinical evaluation of the LevelCheck registration algorithm. *Spine*, **2015**, 40, E476-83	3.3	23
179	Task-driven image acquisition and reconstruction in cone-beam CT. *Physics in Medicine and Biology*, **2015**, 60, 3129-50	3.8	23

178	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
177	Intraoperative evaluation of device placement in spine surgery using known-component 3D-2D image registration. *Physics in Medicine and Biology*, **2017**, 62, 3330-3351	3.8	21
176	An on-board surgical tracking and video augmentation system for C-arm image guidance. *International Journal of Computer Assisted Radiology and Surgery*, **2012**, 7, 647-65	3.9	21
175	Fusion of intraoperative cone-beam CT and endoscopic video for image-guided procedures **2010**,		21
174	Modeling and design of a cone-beam CT head scanner using task-based imaging performance optimization. *Physics in Medicine and Biology*, **2016**, 61, 3180-207	3.8	21
173	Reconstruction of difference in sequential CT studies using penalized likelihood estimation. *Physics in Medicine and Biology*, **2016**, 61, 1986-2002	3.8	20
172	High energy x-ray phase contrast CT using glancing-angle grating interferometers. *Medical Physics*, **2014**, 41, 021904	4.4	20
171	An electromagnetic "Tracker-in-Table" configuration for X-ray fluoroscopy and cone-beam CT-guided surgery. *International Journal of Computer Assisted Radiology and Surgery*, **2013**, 8, 1-13	3.9	19
170	Three-dimensional tomosynthesis and cone-beam computed tomography: an experimental study for fast, low-dose intraoperative imaging technology for guidance of sinus and skull base surgery. *Laryngoscope*, **2009**, 119, 434-41	3.6	19
169	Robust methods for automatic image-to-world registration in cone-beam CT interventional guidance. *Medical Physics*, **2012**, 39, 6484-98	4.4	19
168	Flat-panel cone-beam CT on a mobile isocentric C-arm for image-guided brachytherapy **2002**, 4682, 209		19
167	Task-driven source-detector trajectories in cone-beam computed tomography: I. Theory and methods. *Journal of Medical Imaging*, **2019**, 6, 025002	2.6	19
166	Multi-stage 3D-2D registration for correction of anatomical deformation in image-guided spine surgery. *Physics in Medicine and Biology*, **2017**, 62, 4604-4622	3.8	18
165	Low-dose preview for patient-specific, task-specific technique selection in cone-beam CT. *Medical Physics*, **2014**, 41, 071915	4.4	18
164	Flat-panel cone-beam CT: a novel imaging technology for image-guided procedures **2001**,		18
163	Multiresolution iterative reconstruction in high-resolution extremity cone-beam CT. *Physics in Medicine and Biology*, **2016**, 61, 7263-7281	3.8	18
162	High-performance intraoperative cone-beam CT on a mobile C-arm: an integrated system for guidance of head and neck surgery **2009**,		17
161	Image quality and dose characteristics for an O-arm intraoperative imaging system with model-based image reconstruction. *Medical Physics*, **2018**, 45, 4857-4868	4.4	17

160	Modeling and evaluation of a high-resolution CMOS detector for cone-beam CT of the extremities. *Medical Physics*, **2018**, 45, 114-130	4.4	16
159	Characterization of 3D joint space morphology using an electrostatic model (with application to osteoarthritis). *Physics in Medicine and Biology*, **2015**, 60, 947-60	3.8	16
158	Multimode C-arm fluoroscopy, tomosynthesis, and cone-beam CT for image-guided interventions: from proof of principle to patient protocols **2007**,		16
157	Registration of MRI to intraoperative radiographs for target localization in spinal interventions. *Physics in Medicine and Biology*, **2017**, 62, 684-701	3.8	15
156	Multi-resolution statistical image reconstruction for mitigation of truncation effects: application to cone-beam CT of the head. *Physics in Medicine and Biology*, **2017**, 62, 539-559	3.8	15
155	Toward Intraoperative Image-Guided Transoral Robotic Surgery. *Journal of Robotic Surgery*, **2013**, 7, 217-25	2.9	15
154	Intraoperative image-guided transoral robotic surgery: pre-clinical studies. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2015**, 11, 256-67	2.9	15
153	Deformable image registration with local rigidity constraints for cone-beam CT-guided spine surgery. *Physics in Medicine and Biology*, **2014**, 59, 3761-87	3.8	15
152	Deformable image registration for cone-beam CT guided transoral robotic base-of-tongue surgery. *Physics in Medicine and Biology*, **2013**, 58, 4951-79	3.8	15
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150	Image quality and dose for a multisource cone-beam CT extremity scanner. *Medical Physics*, **2018**, 45, 144-155	4.4	15
149	Image quality of cone beam computed tomography for evaluation of extremity fractures in the presence of metal hardware: visual grading characteristics analysis. *British Journal of Radiology*, **2017**, 90, 20160539	3.4	14
148	Evaluation of detector readout gain mode and bowtie filters for cone-beam CT imaging of the head. *Physics in Medicine and Biology*, **2016**, 61, 5973-92	3.8	14
147	Automatic pedicle screw planning using atlas-based registration of anatomy and reference trajectories. *Physics in Medicine and Biology*, **2019**, 64, 165020	3.8	14
146	Three-dimensional NEQ transfer characteristics of volume CT using direct- and indirect-detection flat-panel imagers **2003**,		14
145	Task-driven source-detector trajectories in cone-beam computed tomography: II. Application to neuroradiology. *Journal of Medical Imaging*, **2019**, 6, 025004	2.6	14
144	Utility of the LevelCheck Algorithm for Decision Support in Vertebral Localization. *Spine*, **2016**, 41, E1249-E1256	3.5	14
143	Peripheral Quantitative CT (pQCT) Using a Dedicated Extremity Cone-Beam CT Scanner. *Proceedings of SPIE*, **2013**, 8672, 867203	1.7	13

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141	Task-driven optimization of CT tube current modulation and regularization in model-based iterative reconstruction. *Physics in Medicine and Biology*, **2017**, 62, 4777-4797	3.8	12
140	Correction of patient motion in cone-beam CT using 3D-2D registration. *Physics in Medicine and Biology*, **2017**, 62, 8813-8831	3.8	12
139	Task-Driven Optimization of Fluence Field and Regularization for Model-Based Iterative Reconstruction in Computed Tomography. *IEEE Transactions on Medical Imaging*, **2017**, 36, 2424-2435	11.7	12
138	Prospective regularization design in prior-image-based reconstruction. *Physics in Medicine and Biology*, **2015**, 60, 9515-36	3.8	12
137	Volume-of-change cone-beam CT for image-guided surgery. *Physics in Medicine and Biology*, **2012**, 57, 4969-89	3.8	12
136	Cone-beam CT with a flat-panel imager: noise considerations for fully 3D computed tomography **2000**,		12
135	A mobile isocentric C-arm for intraoperative cone-beam CT: Technical assessment of dose and 3D imaging performance. *Medical Physics*, **2020**, 47, 958-974	4.4	12
134	Cone-beam computed tomography on a mobile C-arm: novel intraoperative imaging technology for guidance of head and neck surgery. *Journal of Otolaryngology - Head and Neck Surgery*, **2008**, 37, 81-90	5.4	12
133	Task-based statistical image reconstruction for high-quality cone-beam CT. *Physics in Medicine and Biology*, **2017**, 62, 8693-8719	3.8	11
132	Atlas-based automatic planning and 3D-2D fluoroscopic guidance in pelvic trauma surgery. *Physics in Medicine and Biology*, **2019**, 64, 095022	3.8	11
131	Evaluation of low-dose limits in 3D-2D rigid registration for surgical guidance. *Physics in Medicine and Biology*, **2014**, 59, 5329-45	3.8	11
130	Overcoming Nonlinear Partial Volume Effects in Known-Component Reconstruction of Cochlear Implants. *Proceedings of SPIE*, **2013**, 8668, 86681L	1.7	11
129	Cascaded systems analysis of the 3D NEQ for cone-beam CT and tomosynthesis **2008**,		11
128	Mobile C-Arm with a CMOS detector: Technical assessment of fluoroscopy and Cone-Beam CT imaging performance. *Medical Physics*, **2018**, 45, 5420-5436	4.4	11
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125	Virtual fluoroscopy for intraoperative C-arm positioning and radiation dose reduction. *Journal of Medical Imaging*, **2018**, 5, 015005	2.6	10

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123	Polyenergetic known-component CT reconstruction with unknown material compositions and unknown x-ray spectra. *Physics in Medicine and Biology*, **2017**, 62, 3352-3374	3.8	9
122	Known-component 3D image reconstruction for improved intraoperative imaging in spine surgery: A clinical pilot study. *Medical Physics*, **2019**, 46, 3483-3495	4.4	8
121	Dynamic fluence field modulation in computed tomography using multiple aperture devices. *Physics in Medicine and Biology*, **2019**, 64, 105024	3.8	8
120	Automatic Masking for Robust 3D-2D Image Registration in Image-Guided Spine Surgery. *Proceedings of SPIE*, **2016**, 9786,	1.7	8
119	Known-component metal artifact reduction (KC-MAR) for cone-beam CT. *Physics in Medicine and Biology*, **2019**, 64, 165021	3.8	8
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116	High-accuracy 3D image-based registration of endoscopic video to C-arm cone-beam CT for image-guided skull base surgery **2011**,		8
115	Model-based Reconstruction of Objects with Inexactly Known Components. *Proceedings of SPIE*, **2012**, 8313,	1.7	8
114	Effect of fiducial configuration on target registration error in intraoperative cone-beam CT guidance of head and neck surgery. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 3643-8	0.9	8
113	Cone-beam CT with a flat-panel detector on a mobile C-arm: preclinical investigation in image-guided surgery of the head and neck **2005**,		8
112	Cone-beam CT dose and imaging performance evaluation with a modular, multipurpose phantom. *Medical Physics*, **2020**, 47, 467-479	4.4	8
111	Task-Driven Tube Current Modulation and Regularization Design in Computed Tomography with Penalized-Likelihood Reconstruction. *Proceedings of SPIE*, **2016**, 9783,	1.7	8
110	Motion compensation in extremity cone-beam computed tomography. *Skeletal Radiology*, **2019**, 48, 1999-2007	2.7	7
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106	Generalized Least-Squares CT Reconstruction with Detector Blur and Correlated Noise Models. *Proceedings of SPIE*, **2014**, 9033, 903335	1.7	7
105	Deformable registration for intra-operative cone-beam CT guidance of head and neck surgery. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 3634-7	0.9	7
104	C-arm Positioning Using Virtual Fluoroscopy for Image-Guided Surgery. *Proceedings of SPIE*, **2017**, 10135,	1.7	6
103	The Generalized NEQ and Detectability Index for Tomosynthesis and Cone-Beam CT: From Cascaded Systems Analysis to Human Observers. *Proceedings of SPIE*, **2010**, 7622,	1.7	6
102	Visualization of anterior skull base defects with intraoperative cone-beam CT. *Head and Neck*, **2010**, 32, 504-12	4.2	6
101	Analysis of lung nodule detectability and anatomical clutter in tomosynthesis imaging of the chest **2009**,		6
100	High-performance dual-energy imaging with a flat-panel detector: imaging physics from blackboard to benchtop to bedside **2006**,		6
99	Design and validation of an open-source library of dynamic reference frames for research and education in optical tracking. *Journal of Medical Imaging*, **2018**, 5, 021215	2.6	6
98	A General CT Reconstruction Algorithm for Model-Based Material Decomposition. *Proceedings of SPIE*, **2018**, 10573,	1.7	6
97	Design of dual multiple aperture devices for dynamical fluence field modulated CT **2016**, 2016, 29-32		6
96	Predicting image properties in penalized-likelihood reconstructions of flat-panel CBCT. *Medical Physics*, **2019**, 46, 65-80	4.4	6
95	Integration of free-hand 3D ultrasound and mobile C-arm cone-beam CT: Feasibility and characterization for real-time guidance of needle insertion. *Computerized Medical Imaging and Graphics*, **2017**, 58, 13-22	7.6	5
94	Self-Calibration of Cone-Beam CT Geometry Using 3D-2D Image Registration: Development and Application to Task-Based Imaging with a Robotic C-Arm. *Proceedings of SPIE*, **2015**, 9415,	1.7	5
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