Sanford L Meeks

List of Publications by Year
in descending order

119 papers	7,266 citations	53794 45 h-index	56724 83 g-index
120 all docs	120 docs citations	120 times ranked	4855 citing authors

#	Article	IF	Citations
1	Stereotactic body radiation therapy: The report of AAPM Task Group 101. Medical Physics, 2010, 37, 4078-4101.	3.0	1,616
2	Observations on Real-Time Prostate Gland Motion Using Electromagnetic Tracking. International Journal of Radiation Oncology Biology Physics, 2008, 71, 1084-1090.	0.8	339
3	Performance characterization of megavoltage computed tomography imaging on a helical tomotherapy unit. Medical Physics, 2005, 32, 2673-2681.	3.0	188
4	Analysis of risk factors associated with radiosurgery for vestibular schwannoma. Journal of Neurosurgery, 2001, 95, 440-449.	1.6	184
5	Assessment of Parotid Gland Dose Changes During Head and Neck Cancer Radiotherapy Using Daily Megavoltage Computed Tomography and Deformable Image Registration. International Journal of Radiation Oncology Biology Physics, 2008, 71, 1563-1571.	0.8	180
6	Serial megavoltage CT imaging during external beam radiotherapy for nonâ€“small-cell lung cancer: Observations on tumor regression during treatment. International Journal of Radiation Oncology Biology Physics, 2005, 63, 1024-1028.	0.8	172
7	Method and timing of tumor volume measurement for outcome prediction in cervical cancer using magnetic resonance imaging. International Journal of Radiation Oncology Biology Physics, 2002, 52, 14-22.	0.8	164
8	Intraprostatic fiducials for localization of the prostate gland: Monitoring intermarker distances during radiation therapy to test for marker stability. International Journal of Radiation Oncology Biology Physics, 2005, 62, 1291-1296.	0.8	149
9	Initial experience with megavoltage (MV) CT guidance for daily prostate alignments. International Journal of Radiation Oncology Biology Physics, 2005, 62, 1517-1524.	0.8	148
10	Characterization and use of EBT radiochromic film for IMRT dose verification. Medical Physics, 2006, 33, 4064-4072.	3.0	146
11	Deformable registration of the planning image (kVCT) and the daily images (MVCT) for adaptive radiation therapy. Physics in Medicine and Biology, 2006, 51, 4357-4374.	3.0	137
12	Daily variations in delivered doses in patients treated with radiotherapy for localized prostate cancer. International Journal of Radiation Oncology Biology Physics, 2006, 66, 876-882.	0.8	132
13	Evaluation of image-guidance protocols in the treatment of head and neck cancers. International Journal of Radiation Oncology Biology Physics, 2007, 67, 670-677.	0.8	131
14	A technique for adaptive image-guided helical tomotherapy for lung cancer. International Journal of Radiation Oncology Biology Physics, 2006, 64, 1237-1244.	0.8	124
15	Evaluation of geometric changes of parotid glands during head and neck cancer radiotherapy using daily MVCT and automatic deformable registration. Radiotherapy and Oncology, 2008, 89, 81-88.	0.6	109
16	A simple and reliable index for scoring rival stereotactic radiosurgery plans. International Journal of Radiation Oncology Biology Physics, 2003, 57, 1141-1149.	0.8	108
17	Image-Guided Radiotherapy for Localized Prostate Cancer: Treating a Moving Target. Seminars in Radiation Oncology, 2008, 18, 58-66.	2.2	108
18	Image localization for frameless stereotactic radiotherapy. International Journal of Radiation Oncology Biology Physics, 2000, 46, 1291-1299.	0.8	104

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19	Evaluation of Image-Guidance Strategies in the Treatment of Localized Prostate Cancer. International Journal of Radiation Oncology Biology Physics, 2008, 70, 1151-1157.	0.8	104
20	Calibration of three-dimensional ultrasound images for image-guided radiation therapy. Physics in Medicine and Biology, 2001, 46, 559-577.	3.0	101
21	AAPM TG 191: Clinical use of luminescent dosimeters: TLDs and OSLDs. Medical Physics, 2020, 47, e19-e51.	3.0	97
22	Initial clinical experience with frameless stereotactic radiosurgery: analysis of accuracy and feasibility. International Journal of Radiation Oncology Biology Physics, 2001, 51, 1152-1158.	0.8	93
23	Implantation and Stability of Metallic Fiducials Within Pulmonary Lesions. International Journal of Radiation Oncology Biology Physics, 2007, 69, 777-785.	0.8	88
24	Evaluation of an infrared camera and X-ray system using implanted fiducials in patients with lung tumors for gated radiation therapy. International Journal of Radiation Oncology Biology Physics, 2006, 66, 568-575.	0.8	87
25	Patient Dose From Megavoltage Computed Tomography Imaging. International Journal of Radiation Oncology Biology Physics, 2008, 70, 1579-1587.	0.8	87
26	Potential clinical efficacy of intensity-modulated conformal therapy. International Journal of Radiation Oncology Biology Physics, 1998, 40, 483-495.	0.8	84
27	Preliminary experience with frameless stereotactic radiotherapy. International Journal of Radiation Oncology Biology Physics, 1998, 42, 591-599.	0.8	83
28	Optically Guided Patient Positioning Techniques. Seminars in Radiation Oncology, 2005, 15, 192-201.	2.2	74
29	Linear accelerator radiosurgery for nonacoustic schwannomas. International Journal of Radiation Oncology Biology Physics, 1999, 43, 545-548.	0.8	72
30	Evaluation of two tomotherapy-based techniques for the delivery of whole-breast intensity-modulated radiation therapy. International Journal of Radiation Oncology Biology Physics, 2006, 65, 284-290.	0.8	70
31	Real-Time Tumor Tracking in the Lung Using an Electromagnetic Tracking System. International Journal of Radiation Oncology Biology Physics, 2013, 86, 477-483.	0.8	70
32	Does prone positioning reduce small bowel dose in pelvic radiation with intensity-modulated radiotherapy for gynecologic cancer?. International Journal of Radiation Oncology Biology Physics, 2003, 57, 230-238.	0.8	67
33	Clinical evaluation of interfractional variations for whole breast radiotherapy using 3-dimensional surface imaging. Practical Radiation Oncology, 2013, 3, 16-25.	2.1	67
34	Benchmarking of five commercial deformable image registration algorithms for head and neck patients. Journal of Applied Clinical Medical Physics, 2016, 17, 25-40.	1.9	65
35	Serial Therapy-Induced Changes in Tumor Shape in Cervical Cancer and Their Impact on Assessing Tumor Volume and Treatment Response. American Journal of Roentgenology, 2006, 187, 65-72.	2.2	64
36	Calculation of cranial nerve complication probability for acoustic neuroma radiosurgery. International Journal of Radiation Oncology Biology Physics, 2000, 47, 597-602.	0.8	62

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37	A high-precision system for conformal intracranial radiotherapy. International Journal of Radiation Oncology Biology Physics, 2000, 47, 1137-1143.	0.8	62
38	An evaluation of intrafraction motion of the prostate in the prone and supine positions using electromagnetic tracking. Radiotherapy and Oncology, 2011, 99, 37-43.	0.6	60
39	Image registration of BANGÂ® gel dose maps for quantitative dosimetry verification. International Journal of Radiation Oncology Biology Physics, 1999, 43, 1135-1141.	0.8	59
40	Ultrasound-guided extracranial radiosurgery. International Journal of Radiation Oncology Biology Physics, 2003, 55, 1092-1101.	0.8	59
41	Initial clinical experience with frameless radiosurgery for patients with intracranial metastases. International Journal of Radiation Oncology Biology Physics, 2005, 61, 1467-1472.	0.8	59
42	Salvage retreatment after failure of radiosurgery in patients with arteriovenous malformations. Journal of Neurosurgery, 2003, 98, 337-341.	1.6	56
43	Treatment Planning Optimization for Linear Accelerator Radiosurgery. International Journal of Radiation Oncology Biology Physics, 1998, 41, 183-197.	0.8	50
44	Commissioning and quality assurance of an optically guided three-dimensional ultrasound target localization system for radiotherapy. Medical Physics, 2002, 29, 1781-1788.	3.0	48
45	Optimal number of beams for stereotactic body radiotherapy of lung and liver lesions. International Journal of Radiation Oncology Biology Physics, 2006, 66, 906-912.	0.8	48
46	Optically guided intensity modulated radiotherapy. Radiotherapy and Oncology, 2001, 61, 33-44.	0.6	45
47	Optical Tracking Technology in Stereotactic Radiation Therapy. Medical Dosimetry, 2007, 32, 111-120.	0.9	44
48	A geometrically based method for automated radiosurgery planning. International Journal of Radiation Oncology Biology Physics, 2000, 48, 1599-1611.	0.8	41
49	Expanding the use of realâ€time electromagnetic tracking in radiation oncology. Journal of Applied Clinical Medical Physics, 2011, 12, 34-49.	1.9	41
50	A virtual phantom library for the quantification of deformable image registration uncertainties in patients with cancers of the head and neck. Medical Physics, 2013, 40, 111703.	3.0	41
51	A model for predicting lung cancer response to therapy. International Journal of Radiation Oncology Biology Physics, 2007, 67, 601-609.	0.8	40
52	IRLED-Based Patient Localization for Linac Radiosurgery. International Journal of Radiation Oncology Biology Physics, 1998, 41, 433-439.	0.8	39
53	Radiosurgery using a stereotactic headframe system for irradiation of brain tumors in dogs. Journal of the American Veterinary Medical Association, 2001, 219, 1562-1567.	0.5	37
54	Daily variations in the position of the prostate bed in patients with prostate cancer receiving postoperative external beam radiation therapy. International Journal of Radiation Oncology Biology Physics, 2006, 66, 593-596.	0.8	37

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55	Optic-guided stereotactic radiotherapy. Medical Dosimetry, 1998, 23, 221-228.	0.9	36
56	Dosimetric characteristics of a double-focused miniature multileaf collimator. Medical Physics, 1999, 26, 729-733.	3.0	34
57	Dosimetric Effect of Prostate Motion During Helical Tomotherapy. International Journal of Radiation Oncology Biology Physics, 2009, 74, 1134-1142.	0.8	33
58	In vivo determination of extra-target doses received from serial tomotherapy. Radiotherapy and Oncology, 2002, 63, 217-222.	0.6	32
59	Correlation between dosimetric effect and intrafraction motion during prostate treatments delivered with helical tomotherapy. Physics in Medicine and Biology, 2008, 53, 7073-7086.	3.0	29
60	Protracted Radiotherapy Treatment Duration in Medulloblastoma. American Journal of Clinical Oncology: Cancer Clinical Trials, 2003, 26, 55-59.	1.3	28
61	Investigation of Accelerated Partial Breast Patient Alignment and Treatment With Helical Tomotherapy Unit. International Journal of Radiation Oncology Biology Physics, 2008, 70, 1272-1280.	0.8	26
62	Fractionated Stereotactic Radiotherapy: A Short Review. Technology in Cancer Research and Treatment, 2002, 1, 153-172.	1.9	25
63	The radiobiology of radiosurgery and stereotactic radiotherapy. Medical Dosimetry, 1998, 23, 201-207.	0.9	22
64	Distributed Augmented Reality With 3-D Lung Dynamicsâ€"A Planning Tool Concept. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 40-46.	3.2	22
65	A computational method for estimating the dosimetric effect of intra-fraction motion on step-and-shoot IMRT and compensator plans. Physics in Medicine and Biology, 2010, 55, 4187-4202.	3.0	22
66	RTOG 90-05: the real conclusion. International Journal of Radiation Oncology Biology Physics, 2000, 47, 269-271.	0.8	21
67	Analyzing the impact of intrafraction motion: Correlation of different dose metrics with changes in target D95%. Medical Physics, 2011, 38, 4505-4511.	3.0	21
68	Linac scalpel radiosurgery at the university of florida. Medical Dosimetry, 1998, 23, 177-185.	0.9	18
69	Dosimetric effects of rotational output variation and x-ray target degradation on helical tomotherapy plans. Medical Physics, 2009, 36, 2881-2888.	3.0	17
70	Imageâ€guided bolus electron conformal therapy â€" a case study. Journal of Applied Clinical Medical Physics, 2011, 12, 68-75.	1.9	17
71	Ultrasonographic guidance for spinal extracranial radiosurgery: technique and application for metastatic spinal lesions. Neurosurgical Focus, 2001, 11, 1-6.	2.3	14
72	The Mobius <scp>AIRO</scp> mobile <scp>CT</scp> for imageâ€guided proton therapy: Characterization & commissioning. Journal of Applied Clinical Medical Physics, 2017, 18, 130-136.	1.9	14

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73	Radiotherapy for pediatric brain tumors. Seminars in Pediatric Neurology, 1997, 4, 304-319.	2.0	13
74	4D-CT Lung registration using anatomy-based multi-level multi-resolution optical flow analysis and thin-plate splines. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 875-889.	2.8	13
75	Isotropic beam bouquets for shaped beam linear accelerator radiosurgery. Physics in Medicine and Biology, 2001, 46, 2571-2586.	3.0	12
76	Analytic characterization of linear accelerator radiosurgery dose distributions for fast optimization. Physics in Medicine and Biology, 1999, 44, 2777-2787.	3.0	11
77	Effects of vessel geometry and catheter position on dose delivery in intracoronary brachytherapy. IEEE Transactions on Biomedical Engineering, 2003, 50, 1286-1295.	4.2	11
78	Geometrically based optimization for extracranial radiosurgery. Physics in Medicine and Biology, 2004, 49, 987-996.	3.0	11
79	A Comparison of Soft-Tissue Implanted Markers and Bony Anatomy Alignments for Image-Guided Treatments of Head-and-Neck Cancers. International Journal of Radiation Oncology Biology Physics, 2010, 76, 767-774.	0.8	11
80	Low-Grade Gliomas: Answering One Question in a Myriad of New Questions. Journal of Clinical Oncology, 2002, 20, 2223-2224.	1.6	10
81	A geometrically based method of step and shoot stereotactic radiosurgery with a miniature multileaf collimator. Physics in Medicine and Biology, 2005, 50, 3263-3276.	3.0	10
82	Real-Time Simulation of 4D Lung Tumor Radiotherapy Using a Breathing Model. Lecture Notes in Computer Science, 2008, 11, 710-717.	1.3	10
83	Modeling simulation and visualization of conformal 3D lung tumor dosimetry. Physics in Medicine and Biology, 2009, 54, 6165-6180.	3.0	10
84	Commissioning an inâ€room mobile <scp>CT</scp> for adaptive proton therapy with a compact proton system. Journal of Applied Clinical Medical Physics, 2018, 19, 149-158.	1.9	10
85	Practical Considerations for Single Isocenter LINAC Radiosurgery of Multiple Brain Metastases. Practical Radiation Oncology, 2022, 12, 195-199.	2.1	10
86	Quality Assurance of Onboard Megavoltage Computed Tomography Imaging and Target Localization Systems for On- and Off-Line Image-Guided Radiotherapy. International Journal of Radiation Oncology Biology Physics, 2008, 71, S62-S65.	0.8	9
87	A Display Framework for Visualizing Real-Time 3D Lung Tumor Radiotherapy. Journal of Display Technology, 2008, 4, 473-482.	1.2	9
88	Validation of a computational method for assessing the impact of intra-fraction motion on helical tomotherapy plans. Physics in Medicine and Biology, 2009, 54, 6611-6621.	3.0	9
89	Modeling Airflow Using Subject-Specific 4DCT-Based Deformable Volumetric Lung Models. International Journal of Biomedical Imaging, 2012, 2012, 1-10.	3.9	9
90	Technical Report: Diagnostic Scan-Based Planning (DSBP), A Method to Improve the Speed and Safety of Radiation Therapy for the Treatment of Critically Ill Patients. Practical Radiation Oncology, 2020, 10, e425-e431.	2.1	9

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91	A GPU-based framework for modeling real-time 3D lung tumor conformal dosimetry with subject-specific lung tumor motion. Physics in Medicine and Biology, 2010, 55, 5137-5150.	3.0	8
92	Orthogonal image pairs coupled with OSMS for noncoplanar beam angle, intracranial, single-isocenter, SRS treatments with multiple targets on the Varian Edge radiosurgery system. Advances in Radiation Oncology, 2017, 2, 494-502.	1.2	8
93	Effect of Proposed Episode-Based Payment Models on Advanced Radiotherapy Procedures. JCO Oncology Practice, 2021, 17, e1943-e1948.	2.9	8
94	Inverse radiosurgery treatment planning through deconvolution and constrained optimization. Medical Physics, 1998, 25, 1850-1857.	3.0	6
95	The midline dose distribution for a three-field radiotherapy technique. Medical Dosimetry, 1999, 24, 91-98.	0.9	6
96	Stereotactic Radiosurgery. Surgical Oncology Clinics of North America, 2000, 9, 469-487.	1.5	6
97	Spatial correlation of proton irradiationâ€induced activity and dose in polymer gel phantoms for PET/CT delivery verification studies. Medical Physics, 2011, 38, 6483-6488.	3.0	6
98	A comparison of the dosimetric effects of intrafraction motion on stepâ€andâ€shoot, compensator, and helical tomotherapyâ€based IMRT. Journal of Applied Clinical Medical Physics, 2013, 14, 121-132.	1.9	6
99	Variability in commercially available deformable image registration: A multiâ€institution analysis using virtual head and neck phantoms. Journal of Applied Clinical Medical Physics, 2021, 22, 89-96.	1.9	6
100	An experimental investigation into the effect of periodic motion on proton dosimetry using polymer gel dosimeters and a programmable motion platform. Physics in Medicine and Biology, 2012, 57, 649-663.	3.0	5
101	A margin-based analysis of the dosimetric impact of motion on step-and-shoot IMRT lung plans. Radiation Oncology, 2014, 9, 46.	2.7	5
102	Impact of Radiation Oncology Alternative Payment Model on Community Cancer Centers. JCO Oncology Practice, 2021, 17, e1949-e1957.	2.9	5
103	In response to Dr. Dar et al. International Journal of Radiation Oncology Biology Physics, 2006, 64, 328-329.	0.8	4
104	Effectiveness of baseâ€ofâ€skull immobilization system in a compact proton therapy setting. Journal of Applied Clinical Medical Physics, 2018, 19, 261-267.	1.9	4
105	Radiosurgery technology development and use. Journal of Radiosurgery and SBRT, 2011, 1, 21-29.	0.2	4
106	Estimating the actual dose delivered by intravascular coronary brachytherapy using geometrically correct 3D modeling. , 2003, , .		3
107	Megavoltage Computed Tomography Image-based Low-dose Rate Intracavitary Brachytherapy Planning for Cervical Carcinoma. Technology in Cancer Research and Treatment, 2009, 8, 123-129.	1.9	3
108	An optimized approach for robust spot placement in proton pencil beam scanning. Physics in Medicine and Biology, 2019, 64, 235016.	3.0	3

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109	Visualization of tumor-influenced 3D lung dynamics. , 2006, , .		2
110	Evaluation of cine imaging during multileaf collimator and gantry motion for realâ€time magnetic resonance guided radiation therapy. Journal of Applied Clinical Medical Physics, 2020, 21, 178-187.	1.9	2
111	Research productivity of radiation therapy physics faculty in the United States. Journal of Applied Clinical Medical Physics, 2021, 22, 185-195.	1.9	2
112	Intrafraction motion during frameless radiosurgery using Varian HyperArc and BrainLab Elements immobilization systems. Journal of Radiosurgery and SBRT, 2020, 7, 149-156.	0.2	2
113	Visualization of 3D volumetric lung dynamics for real-time external beam lung radiotherapy. Studies in Health Technology and Informatics, 2011, 163, 567-73.	0.3	2
114	Megavoltage Computed Tomography Imaging. , 2008, , 27-35.		1
115	Patient Positioning in Radiotherapy Using Optical-Guided 3D Ultrasound Techniques. , 2006, , 151-163.		1
116	Fractionated stereotactic radiotherapy for choroidal melanoma. Radiotherapy and Oncology, 1997, 45, 99.	0.6	0
117	Development of a Virtual Radiation Oncology Clinic for training and simulation of errors in the radiation oncology workflow. Practical Radiation Oncology, 2018, 8, 239-244.	2.1	0
118	Stereotactic Radiosurgery with the Linac Scalpel. , 2003, , .		0
119	Dosimetric Comparison of Various Spot Placement Techniques in Proton Pencil Beam Scanning. International Journal of Particle Therapy, 2022, 9, 54-63.	1.8	0