Martina Descovich

List of Publications by Year
in descending order

52 papers	1,089 citations	430874 18 h-index	395702 33 g-index
55 all docs	55 docs citations	55 times ranked	1136 citing authors

#	Article	IF	Citations
1	Improved accuracy of relative electron density and proton stopping power ratio through CycleGAN machine learning. Physics in Medicine and Biology, 2022, 67, 105001.	3.0	3
2	Improved contrast and noise of megavoltage computed tomography (MVCT) through cycleâ€consistent generative machine learning. Medical Physics, 2021, 48, 676-690.	3.0	14
3	Irradiation of Nf1 mutant mouse models of spinal plexiform neurofibromas drives pathologic progression and decreases survival. Neuro-Oncology Advances, 2021, 3, vdab063.	0.7	4
4	Stereotactic Body Radiation Therapy and High-Dose-Rate Brachytherapy Boost in Combination With Intensity Modulated Radiation Therapy for Localized Prostate Cancer: A Single-Institution Propensity Score Matched Analysis. International Journal of Radiation Oncology Biology Physics, 2021, 110, 429-437.	0.8	10
5	Technical Note: Performance of CyberKnife Â® tracking using lowâ€dose CT and kV imaging. Medical Physics, 2020, 47, 6163-6170.	3.0	2
6	DoseGAN: a generative adversarial network for synthetic dose prediction using attention-gated discrimination and generation. Scientific Reports, 2020, 10, 11073.	3.3	50
7	SBRT for High-Risk Prostate Cancer. , 2019, , 153-169.		0
8	DoseNet: a volumetric dose prediction algorithm using 3D fully-convolutional neural networks. Physics in Medicine and Biology, 2018, 63, 235022.	3.0	129
9	Influence of respiratory motion management technique on radiation pneumonitis risk with robotic stereotactic body radiation therapy. Journal of Applied Clinical Medical Physics, 2018, 19, 48-57.	1.9	7
10	Stereotactic body radiation therapy for non-small cell lung cancer patients with prior history of thoracic surgery and/or radiation therapy: the influence of smoking, size, and central location on risk of complications. Journal of Radiation Oncology, 2018, 7, 53-61.	0.7	0
11	Stereotactic Body Radiotherapy (SBRT) in the Management of Clinically Localized Prostate Cancer: Where are We Now?. Current Cancer Therapy Reviews, 2018, 14, 31-45.	0.3	1
12	A continuous arc delivery optimization algorithm for CyberKnife m6. Medical Physics, 2018, 45, 3861-3870.	3.0	12
13	Interfraction Anatomical Variability Can Lead to Significantly Increased Rectal Dose for Patients Undergoing Stereotactic Body Radiotherapy for Prostate Cancer. Technology in Cancer Research and Treatment, 2017, 16, 178-187.	1.9	22
14	An Evaluation of Robotic and Conventional IMRT for Prostate Cancer: Potential for Dose Escalation. Technology in Cancer Research and Treatment, 2017, 16, 267-275.	1.9	1
15	Respiration-Induced Intraorgan Deformation of the Liver: Implications for Treatment Planning in Patients Treated With Fiducial Tracking. Technology in Cancer Research and Treatment, 2017, 16, 776-782.	1.9	9
16	Dosimetric Comparison Between 3-Dimensional Conformal and Robotic SBRT Treatment Plans for Accelerated Partial Breast Radiotherapy. Technology in Cancer Research and Treatment, 2016, 15, 437-445.	1.9	12
17	Physics of Stereotactic Radiosurgery and Stereotactic Body Radiotherapy. , 2016, , 23-38.		2
18	CyberKnife image-guided hypofractionated stereotactic radiotherapy. , 2016, , 49-57.		1

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19	Investigating the clinical advantages of a robotic linac equipped with a multileaf collimator in the treatment of brain and prostate cancer patients. Journal of Applied Clinical Medical Physics, 2015, 16, 284-295.	1.9	42
20	Comparison between target margins derived from 4DCT scans and realâ€time tumor motion tracking: Insights from lung tumor patients treated with robotic radiosurgery. Medical Physics, 2015, 42, 1280-1287.	3.0	27
21	Gold fiducial marker tracking to optimize radiotherapy for organ-preserving treatment of muscle-invasive bladder cancer. Journal of Radiation Oncology, 2015, 4, 283-290.	0.7	1
22	Analysis of Dose Distribution and Risk of Pneumonitis in Stereotactic Body Radiation Therapy for Centrally Located Lung Tumors. Technology in Cancer Research and Treatment, 2015, 14, 49-60.	1.9	12
23	Dose-volume analysis and the temporal nature of toxicity with stereotactic body radiation therapy for prostate cancer. Practical Radiation Oncology, 2015, 5, e465-e472.	2.1	34
24	Evaluation of ray tracing and Monte Carlo algorithms in dose calculation and clinical outcomes for robotic stereotactic body radiotherapy of lung cancers. Journal of Radiosurgery and SBRT, 2014, 3, 67-79.	0.2	0
25	Improving plan quality and consistency by standardization of dose constraints in prostate cancer patients treated with CyberKnife. Journal of Applied Clinical Medical Physics, 2013, 14, 162-172.	1.9	19
26	MO-F-WAB-08: Are Planning Target Volumes Derived From 4DCT Scans Adequate When Treating Lung SBRT with Static Tracking Methods?. Medical Physics, 2013, 40, 411-411.	3.0	0
27	Comparison between Prone and Supine Patient Setup for Spine Stereotactic Body Radiosurgery. Technology in Cancer Research and Treatment, 2012, 11, 229-236.	1.9	12
28	Stereotactic Body Radiotherapy as Monotherapy or Postâ€“External Beam Radiotherapy Boost for Prostate Cancer: Technique, Early Toxicity, and PSA Response. International Journal of Radiation Oncology Biology Physics, 2012, 82, 228-234.	0.8	101
29	A new method to characterize target location in lung cancer patients treated with stereotactic body radiation therapy. Journal of Radiation Oncology, 2012, 1, 65-71.	0.7	2
30	Temporal compartmental dosing effects for robotic prostate stereotactic body radiotherapy. Physics in Medicine and Biology, 2011, 56, 7767-7775.	3.0	1
31	Apparatus dependence of normal brain tissue dose in stereotactic radiosurgery for multiple brain metastases. Journal of Neurosurgery, 2011, 114, 1580-1584.	1.6	59
32	A Two-Step Optimization Method for Improving Multiple Brain Lesion Treatments with Robotic Radiosurgery. Technology in Cancer Research and Treatment, 2011, 10, 331-338.	1.9	9
33	Editorial: Brain dose with stereotactic radiosurgery. Journal of Neurosurgery, 2011, 114, 1578-1579.	1.6	0
34	Dose Gradient Near Targetâ€“Normal Structure Interface for Nonisocentric CyberKnife and Isocentric Intensity-Modulated Body Radiotherapy for Prostate Cancer. International Journal of Radiation Oncology Biology Physics, 2010, 78, 58-63.	0.8	72
35	Comparison Between Hybrid Direct Aperture Optimized Intensity-Modulated Radiotherapy and Forward Planning Intensity-Modulated Radiotherapy for Whole Breast Irradiation. International Journal of Radiation Oncology Biology Physics, 2010, 76, 91-99.	0.8	27
36	Equivalence in Dose Fall-Off for Isocentric and Nonisocentric Intracranial Treatment Modalities and Its Impact on Dose Fractionation Schemes. International Journal of Radiation Oncology Biology Physics, 2010, 76, 943-948.	0.8	49

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37	Functional Relationship between the Volume of a Near-Target Peripheral Isodose Line and Its Isodose Value for Gamma Knife®Radiosurgery. Radiosurgery, 2010, , 75-83.	0.1	3
38	SU-GG-T-510: A Two-Step Optimization Technique for Planning Multi-Target Treatments with Robotic Radiotherapy. Medical Physics, 2010, 37, 3304-3304.	3.0	0
39	A dosimetric comparison between Gamma Knife and CyberKnife treatment plans for trigeminal neuralgia. Journal of Neurosurgery, 2010, 113 Suppl, 199-206.	1.6	6
40	Physical performance and image optimization of megavoltage coneâ€beam CT. Medical Physics, 2009, 36, 1421-1432.	3.0	23
41	Nonrandom Intrafraction Target Motions and General Strategy for Correction of Spine Stereotactic Body Radiotherapy. International Journal of Radiation Oncology Biology Physics, 2009, 75, 1261-1265.	0.8	62
42	TH-D-303A-02: Correction Strategy to Overcome Non-Random Target Motions for Hypofractionated Spine Body Radiotherapy. Medical Physics, 2009, 36, 2814-2814.	3.0	0
43	SU-FF-T-535: Effects of Peripheral Dose Fall-Off On Biologically Equivalent Dose to Normal Brain for Intracranial Stereotactic Radiosurgery and Radiotherapy. Medical Physics, 2009, 36, 2647-2647.	3.0	0
44	2008, 35, 5110-5114.	3.0	32
45	Characteristics of megavoltage coneâ€beam digital tomosynthesis. Medical Physics, 2008, 35, 1310-1316.	3.0	15
46	TUâ€EEâ€A4â€03: Calculation of the Dose of the Day Using Megavoltage Coneâ€Beam CT. Medical Physics, 2008, 35, 2914-2914.	3.0	0
47	SUâ€EEâ€A2â€01: A General Formula Predicting Nearâ€Target Dose Fallâ€Off Characteristics for Different Isocentric and Nonâ€Isocentric Delivery Modalities. Medical Physics, 2008, 35, 2638-2638.	3.0	0
48	Patient dose considerations for routine megavoltage cone-beam CT imaging. Medical Physics, 2007, 34, 1819-1827.	3.0	80
49	Dose calculation using megavoltage cone-beam CT. International Journal of Radiation Oncology Biology Physics, 2007, 67, 1201-1210.	0.8	72
50	Image-guided radiotherapy using megavoltage cone-beam computed tomography for treatment of paraspinous tumors in the presence of orthopedic hardware. International Journal of Radiation Oncology Biology Physics, 2006, 66, 323-326.	0.8	50
51	TU-FF-A3-05: Dosimetric Effect of Cupping Artefact in MVCBCT Images of the Head and Neck Region. Medical Physics, 2006, 33, 2221-2221.	3.0	0
52	TH-D-ValB-05: Evaluation of Image Quality in Megavoltage Digital Tomosynthesis. Medical Physics, 2006, 33, 2281-2281.	3.0	0