Richard A Popple

List of Publications by Year
in descending order

93 papers	2,434 citations	249298 26 h-index	242451 47 g-index
95 all docs	95 docs citations	95 times ranked	2529 citing authors

#	Article	IF	Citations
1	Practical Considerations for Single Isocenter LINAC Radiosurgery of Multiple Brain Metastases. Practical Radiation Oncology, 2022, 12, 195-199.	1.1	10
2	Commissioning a multileaf collimator virtual cone for the stereotactic radiosurgery of trigeminal neuralgia. Journal of Applied Clinical Medical Physics, 2022, 23, e13562.	0.8	8
3	Hypofractionated radiation leads to more rapid bleeding cessation in women with vaginal bleeding secondary to gynecologic malignancy. Radiation Oncology, 2022, 17, 34.	1.2	1
4	Analysis of a surface imaging system using a six degreeâ€ofâ€freedom couch. Journal of Applied Clinical Medical Physics, 2022, 23, .	0.8	5
5	Accuracy of doseâ€volume metric calculation for smallâ€volume radiosurgery targets. Medical Physics, 2021, 48, 1461-1468.	1.6	9
6	Transition From Manual to Automated Planning and Delivery of Volumetric Modulated Arc Therapy Stereotactic Radiosurgery: Clinical, Dosimetric, and Quality Assurance Results. Practical Radiation Oncology, 2021, 11, e163-e171.	1.1	18
7	A Holographic Augmented Reality Guidance System for Patient Alignment: A Feasibility Study. Cureus, 2021, 13, e14695.	0.2	1
8	A Low-Cost Method to Assess the Performance of Surface Guidance Imaging Systems at Non-Zero Couch Angles. Cureus, 2021, 13, e14278.	0.2	5
9	Code Wisely: Risk assessment and mitigation for custom clinical software. Journal of Applied Clinical Medical Physics, 2021, 22, 273-279.	0.8	3
10	Evaluation of a twoâ€dimensional diode array for patientâ€specific quality assurance of HyperArc. Journal of Applied Clinical Medical Physics, 2021, 22, 203-210.	0.8	7
11	Focal Management of Large Brain Metastases and Risk of Leptomeningeal Disease. Advances in Radiation Oncology, 2020, 5, 34-42.	0.6	21
12	Anchored Transponder Guided Lung Radiation Therapy. Practical Radiation Oncology, 2020, 10, e37-e44.	1.1	7
13	Using a whiteboard web application for tracking treatment workflow metrics for dosimetrists and physicians. Medical Dosimetry, 2020, 45, 73-76.	0.4	4
14	Interinstitutional Plan Quality Assessment of 2 Linac-Based, Single-Isocenter, Multiple Metastasis Radiosurgery Techniques. Advances in Radiation Oncology, 2020, 5, 1051-1060.	0.6	19
15	Surface guided imaging during stereotactic radiosurgery with automated delivery. Journal of Applied Clinical Medical Physics, 2020, 21, 90-95.	0.8	17
16	Technical Note: Use of automation to eliminate shift errors. Journal of Applied Clinical Medical Physics, 2020, 21, 192-195.	0.8	2
17	Safety Procedures and Checklists for Radiosurgery. , 2020, , 323-334.		1
18	Single-Isocenter, Multiple Metastasis Treatment Planning. , 2020, , 249-280.		1

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19	Feasibility of Dose Escalating [18F]fluciclovine Positron Emission Tomography Positive Pelvic Lymph Nodes During Moderately Hypofractionated Radiation Therapy for High-Risk Prostate Cancer. Advances in Radiation Oncology, 2019, 4, 649-658.	0.6	5
20	LINAC based stereotactic radiosurgery for multiple brain metastases: guidance for clinical implementation. Acta OncolÃ³gica, 2019, 58, 1275-1282.	0.8	50
21	Technical Note: An open source solution for improving TGâ€263 compliance. Journal of Applied Clinical Medical Physics, 2019, 20, 163-165.	0.8	9
22	Use of a plastic scintillator detector for patientâ€specific quality assurance of VMAT SRS. Journal of Applied Clinical Medical Physics, 2019, 20, 143-148.	0.8	5
23	Management of radiotherapy patients with implanted cardiac pacemakers and defibrillators: A Report of the AAPM TGâ€203^{â€}. Medical Physics, 2019, 46, e757-e788.	1.6	77
24	Electromagnetic Transponder Based Tracking and Gating in the Radiotherapeutic Treatment of Thoracic Malignancies. Practical Radiation Oncology, 2019, 9, 456-464.	1.1	7
25	Optical surface guidance for submillimeter monitoring of patient position during frameless stereotactic radiotherapy. Journal of Applied Clinical Medical Physics, 2019, 20, 91-98.	0.8	33
26	Stereotactic radiosurgery with <scp>MLC</scp>â€defined arcs: Verification of dosimetry, spatial accuracy, and endâ€toâ€end tests. Journal of Applied Clinical Medical Physics, 2019, 20, 84-98.	0.8	26
27	Assessing the feasibility of single target radiosurgery quality assurance with portal dosimetry. Journal of Applied Clinical Medical Physics, 2019, 20, 135-140.	0.8	8
28	Machine learning for automated quality assurance in radiotherapy: A proof of principle using <scp>EPID</scp> data description. Medical Physics, 2019, 46, 1914-1921.	1.6	29
29	Radiation Oncologist Characteristics and their Association with Outcomes in Patients with Head and Neck Cancer. Practical Radiation Oncology, 2019, 9, e322-e330.	1.1	1
30	Prostate Stereotactic Body Radiation Therapy With a Focal Simultaneous Integrated Boost: Acute Toxicity and Dosimetry Results From a Prospective Trial. Advances in Radiation Oncology, 2019, 4, 90-95.	0.6	19
31	Longitudinal assessment of anchored transponder migration following lung stereotactic body radiation therapy. Journal of Applied Clinical Medical Physics, 2019, 20, 17-22.	0.8	4
32	American Association of Physicists in Medicine Task Group 263: Standardizing Nomenclatures in Radiation Oncology. International Journal of Radiation Oncology Biology Physics, 2018, 100, 1057-1066.	0.4	140
33	The virtual cone: A novel technique to generate spherical dose distributions using a multileaf collimator and standardized control-point sequence for small target radiation surgery. Advances in Radiation Oncology, 2018, 3, 421-430.	0.6	12
34	Linac-Based Stereotactic Radiosurgery and Hypofractionated Stereotactic Radiotherapy. , 2018, , 639-663.		2
35	Evaluation of multiple factors affecting normal brain dose in single-isocenter multiple target radiosurgery. Journal of Radiosurgery and SBRT, 2018, 5, 131-144.	0.2	12
36	Fractionated stereotactic radiation therapy for intact brain metastases. Advances in Radiation Oncology, 2017, 2, 564-571.	0.6	54

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37	A priori patient-specific collision avoidance in radiotherapy using consumer grade depth cameras. Medical Physics, 2017, 44, 3430-3436.	1.6	22
38	Development of a flattening filter free multiple source model for use as an independent, Monte Carlo, dose calculation, quality assurance tool for clinical trials. Medical Physics, 2017, 44, 4952-4960.	1.6	0
39	State of dose prescription and compliance to international standard (ICRU-83) in intensity modulated radiation therapy among academic institutions. Practical Radiation Oncology, 2017, 7, e145-e155.	1.1	38
40	Evaluation of the Eclipse eMC algorithm for bolus electron conformal therapy using a standard verification dataset. Journal of Applied Clinical Medical Physics, 2016, 17, 52-60.	0.8	8
41	A novel dynamic field-matching technique for treatment of patients with para-aortic node-positive cervical cancer: Clinical experience. Reports of Practical Oncology and Radiotherapy, 2016, 21, 37-41.	0.3	2
42	Automating linear accelerator quality assurance. Medical Physics, 2015, 42, 6074-6083.	1.6	36
43	In Reply. Neurosurgery, 2015, 77, E311.	0.6	3
44	In Reply. Neurosurgery, 2015, 76, E353-E354.	0.6	1
45	Increased radiation dose heterogeneity within the prostate predisposes to urethral strictures in patients receiving moderately hypofractionated prostate radiation therapy. Practical Radiation Oncology, 2015, 5, 338-342.	1.1	10
46	Retention Rate of Electromagnetic Navigation Bronchoscopic Placed Fiducial Markers for LungÂRadiosurgery. Annals of Thoracic Surgery, 2015, 100, 1163-1166.	0.7	20
47	Because of the advantages of rotational techniques, conventional IMRT will soon become obsolete. Medical Physics, 2014, 41, 100601.	1.6	6
48	Beam geometry selection using sequential beam addition. Medical Physics, 2014, 41, 051713.	1.6	6
49	Reduced Radiation Tolerance of PenileÂStructures Associated With Dose-escalated Hypofractionated Prostate Radiotherapy. Urology, 2014, 84, 1383-1388.	0.5	19
50	Physics, 2014, 41, 111703.	1.6	12
51	Comparison of Plan Quality and Delivery Time Between Volumetric Arc Therapy (RapidArc) and Gamma Knife Radiosurgery for Multiple Cranial Metastases. Neurosurgery, 2014, 75, 409-418.	0.6	160
52	Different rectal toxicity tolerance with and without simultaneous conventionally-fractionated pelvic lymph node treatment in patients receiving hypofractionated prostate radiotherapy. Radiation Oncology, 2014, 9, 129.	1.2	10
53	Patient safety considerations concerning the scheduling of emergencyâ€off system tests. Journal of Applied Clinical Medical Physics, 2014, 15, 327-336.	0.8	1
54	Image Guided Radiation Therapy (IGRT) Technologies for Radiation Therapy Localization and Delivery. International Journal of Radiation Oncology Biology Physics, 2013, 87, 33-45.	0.4	120

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55	Stereotactic body radiation therapy (SBRT) for lung malignancies: preliminary toxicity results using a flattening filter-free linear accelerator operating at 2400 monitor units per minute. Radiation Oncology, 2013, 8, 273.	1.2	29
56	Demonstration of a software design and statistical analysis methodology with application to patient outcomes data sets. Medical Physics, 2013, 40, 111718.	1.6	3
57	Flattening filterâ€free linac improves treatment delivery efficiency in stereotactic body radiation therapy. Journal of Applied Clinical Medical Physics, 2013, 14, 64-71.	0.8	68
58	Effects of flattening filterâ€free and volumetricâ€modulated arc therapy delivery on treatment efficiency. Journal of Applied Clinical Medical Physics, 2013, 14, 155-166.	0.8	38
59	Plan quality and treatment planning technique for single isocenter cranial radiosurgery with volumetric modulated arc therapy. Practical Radiation Oncology, 2012, 2, 306-313.	1.1	132
60	Dosimetric analysis of imaging changes following pulmonary stereotactic body radiation therapy. Journal of Medical Imaging and Radiation Oncology, 2011, 55, 90-96.	0.9	5
61	Effect of respiratory trace shape on optimal treatment margin. Medical Physics, 2011, 38, 3125-3129.	1.6	2
62	Dynamic MLC leaf sequencing for integrated linear accelerator control systems. Medical Physics, 2011, 38, 6039-6045.	1.6	8
63	Improved clinical efficiency in CNS stereotactic radiosurgery using a flattening filter free linear accelerator. Journal of Radiosurgery and SBRT, 2011, 1, 117-122.	0.2	13
64	Evaluation of the interplay effect when using RapidArc to treat targets moving in the craniocaudal or rightâ€left direction. Medical Physics, 2010, 37, 4-11.	1.6	70
65	Feasibility of Single-Isocenter Volumetric Modulated Arc Radiosurgery for Treatment of Multiple Brain Metastases. International Journal of Radiation Oncology Biology Physics, 2010, 76, 296-302.	0.4	227
66	RapidArc Radiation Therapy: First Year Experience at the University of Alabama at Birmingham. International Journal of Radiation Oncology Biology Physics, 2010, 77, 932-941.	0.4	32
67	Performance of a Commercial Macro Monte Carlo Dose Calculation Algorithm for Determining Output Factors of Clinical Electron Fields. Technology in Cancer Research and Treatment, 2009, 8, 307-314.	0.8	6
68	Beam's-Eye-View Dosimetricsâ€“Guided Inverse Planning for Aperture-Modulated Arc Therapy. International Journal of Radiation Oncology Biology Physics, 2009, 75, 1587-1595.	0.4	18
69	An imrt technique to increase therapeutic ratio of breast irradiation in patients with early-stage left breast cancer: limiting second malignancies. Medical Dosimetry, 2008, 33, 71-77.	0.4	22
70	Technical note: Heterogeneity dose calculation accuracy in IMRT: Study of five commercial treatment planning systems using an anthropomorphic thorax phantom. Medical Physics, 2008, 35, 5434-5439.	1.6	40
71	Effect of beam number on organâ€atâ€risk sparing in dynamic multileaf collimator delivery of intensity modulated radiation therapy. Medical Physics, 2007, 34, 3752-3759.	1.6	14
72	A Dosimetric Comparison of Electronic Compensation, Conventional Intensity Modulated Radiotherapy, and Tomotherapy in Patients With Early-Stage Carcinoma of the Left Breast. International Journal of Radiation Oncology Biology Physics, 2007, 68, 1505-1511.	0.4	62

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73	In Reply To Dr. Heyman et al.. International Journal of Radiation Oncology Biology Physics, 2007, 69, 1650-1651.	0.4	0
74	Dosimetric comparison of IMRT to HDR intracavitary brachytherapy for cervical cancer. Brachytherapy, 2007, 6, 84.	0.2	3
75	Use of a multileaf collimator to increase the field width achievable with a dynamic wedge. Journal of Applied Clinical Medical Physics, 2006, 7, 35-42.	0.8	0
76	Intensity-modulated radiotherapy (IMRT) for carcinoma of the maxillary sinus: A comparison of IMRT planning systems. Medical Dosimetry, 2006, 31, 224-232.	0.4	2
77	Preoperative radiation therapy with selective dose escalation to the margin at risk for retroperitoneal sarcoma. Cancer, 2006, 107, 371-379.	2.0	155
78	Implementation of Talairach Atlas Based Automated Brain Segmentation for Radiation Therapy Dosimetry. Technology in Cancer Research and Treatment, 2006, 5, 15-21.	0.8	10
79	Dosimetric and radiobiological impact of dose fractionation on respiratory motion induced IMRT delivery errors: A volumetric dose measurement study. Medical Physics, 2006, 33, 1380-1387.	1.6	66
80	Comprehensive evaluation of a commercial macro Monte Carlo electron dose calculation implementation using a standard verification data set. Medical Physics, 2006, 33, 1540-1551.	1.6	55
81	Determination of field size-dependent wedge factors from a few selected measurements. Journal of Applied Clinical Medical Physics, 2005, 6, 51-60.	0.8	4
82	Simultaneous optimization of sequential IMRT plans. Medical Physics, 2005, 32, 3257-3266.	1.6	8
83	Determination of field size-dependent wedge factors from a few selected measurements. Journal of Applied Clinical Medical Physics, 2005, 6, 51-60.	0.8	2
84	Attenuation of intracavitary applicators in 192Ir-HDR brachytherapy. Medical Physics, 2004, 31, 2097-2106.	1.6	10
85	A dynamic supraclavicular field-matching technique for head-and-neck cancer patients treated with IMRT. International Journal of Radiation Oncology Biology Physics, 2004, 60, 959-972.	0.4	27
86	Custom step wedge blocking using dynamic multileaf collimation for parametrial pelvic boost irradiation following brachytherapy for carcinoma of the cervix. Medical Physics, 2003, 30, 2699-2702.	1.6	5
87	Dosimetric effect of respiration-gated beam on IMRT delivery. Medical Physics, 2003, 30, 2241-2252.	1.6	37
88	Validation of target volume and position in respiratory gated CT planning and treatment. Medical Physics, 2003, 30, 3196-3205.	1.6	52
89	Sequential annealingâ€“gradient Gamma-Knife radiosurgery optimization. Physics in Medicine and Biology, 2003, 48, 2071-2080.	1.6	4
90	Assaying 192Ir line sources using a standard length well chamber. Medical Physics, 2002, 29, 2692-2697.	1.6	2

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91	Tumor control probability for selective boosting of hypoxic subvolumes, including the effect of reoxygenation. International Journal of Radiation Oncology Biology Physics, 2002, 54, 921-927.	0.4	91
92	Delivery of Multiple IMRT Fields Using a Single Physical Attenuator. , 2000, , 191-193.		5
93	Beam-commissioning methodology for a three-dimensional convolution/superposition photon dose algorithm. Journal of Applied Clinical Medical Physics, 2000, 1, .	0.8	0