

# Rao F Khan

## List of Publications by Year in descending order

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53  
papers

546  
citations

840585

11  
h-index

752573

20  
g-index

53  
all docs

53  
docs citations

53  
times ranked

684  
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing 3D printing in the fabrication of variable density phantoms for quality assurance of radiotherapy. <i>Physica Medica</i> , 2016, 32, 242-247.	0.4	103
2	Clinical impact of using the deterministic patient dose calculation algorithm Acuros XB for lung stereotactic body radiation therapy. <i>Acta Oncologica</i> , 2014, 53, 324-329.	0.8	42
3	Response characterization of EBT-D radiochromic films in megavoltage photon and electron beams. <i>Medical Physics</i> , 2019, 46, 4246-4256.	1.6	30
4	Studying the response of CR-39 detectors using the Monte Carlo technique. <i>Radiation Measurements</i> , 2001, 33, 129-137.	0.7	26
5	Electron spin resonance spectroscopy reveals alpha-phenyl-N-tert-butyl nitron spin-traps free radicals in rat striatum and prevents haloperidol-induced vacuous chewing movements in the rat model of human tardive dyskinesia. <i>Synapse</i> , 2004, 54, 156-163.	0.6	23
6	Assessing the deviation from the inverse square law for orthovoltage beams with closed-ended applicators. <i>Journal of Applied Clinical Medical Physics</i> , 2014, 15, 356-366.	0.8	20
7	Spectral analysis of the EBT3 radiochromic films for clinical photon and electron beams. <i>Medical Physics</i> , 2019, 46, 973-982.	1.6	20
8	The influence of target and patient characteristics on the volume obtained from cone beam CT in lung stereotactic body radiation therapy. <i>Radiotherapy and Oncology</i> , 2013, 106, 312-316.	0.3	17
9	On the spectral characterization of radiochromic films irradiated with clinical proton beams. <i>Physics in Medicine and Biology</i> , 2019, 64, 135016.	1.6	17
10	Effect of Acuros XB algorithm on monitor units for stereotactic body radiotherapy planning of lung cancer. <i>Medical Dosimetry</i> , 2014, 39, 83-87.	0.4	14
11	Evaluation of mixed energy partial arcs for volumetric modulated arc therapy for prostate cancer. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 51-65.	0.8	13
12	Telecommuting: A viable option for medical physicists amid the COVID-19 outbreak and beyond. <i>Medical Physics</i> , 2020, 47, 2045-2048.	1.6	13
13	Biophysical dose measurement using electron paramagnetic resonance in rodent teeth. <i>Applied Radiation and Isotopes</i> , 2003, 59, 189-196.	0.7	12
14	Characterization of a 2.5 MV inline portal imaging beam. <i>Journal of Applied Clinical Medical Physics</i> , 2016, 17, 222-234.	0.8	11
15	Modulated photon radiotherapy (XMRT): an algorithm for the simultaneous optimization of photon beamlet energy and intensity in external beam radiotherapy (EBRT) planning. <i>Physics in Medicine and Biology</i> , 2016, 61, 1476-1498.	1.6	9
16	Verification of Acuros XB dose algorithm using 3D printed low-density phantoms for clinical photon beams. <i>Journal of Applied Clinical Medical Physics</i> , 2018, 19, 32-43.	0.8	9
17	Characterizing a Geant4 Monte Carlo model of a multileaf collimator for a TrueBeam linear accelerator. <i>Physica Medica</i> , 2019, 59, 1-12.	0.4	9
18	Mitigating disruptions, and scalability of radiation oncology physics work during the COVID-19 pandemic. <i>Journal of Applied Clinical Medical Physics</i> , 2020, 21, 187-195.	0.8	9

#	ARTICLE	IF	CITATIONS
19	Evolution of clinical radiotherapy physics practice under COVID-19 constraints. <i>Radiotherapy and Oncology</i> , 2020, 148, 274-278.	0.3	9
20	Dosimetric response evaluation of tooth enamel for accelerator-based neutron radiation. <i>Radiation Measurements</i> , 2003, 37, 355-363.	0.7	8
21	Inter- and Intra-Observer Variability in Prostate Definition With Tissue Harmonic and Brightness Mode Imaging. <i>International Journal of Radiation Oncology Biology Physics</i> , 2012, 82, e9-e16.	0.4	8
22	Role of in vivo dosimetry with radiochromic films for dose verification during cutaneous radiation therapy. <i>Radiation Oncology</i> , 2015, 10, 12.	1.2	8
23	Radiation therapy for deep periocular cancer treatments when protons are unavailable: is combining electrons and orthovoltage therapy beneficial?. <i>Journal of Radiation Research</i> , 2018, 59, 593-603.	0.8	8
24	Neutron activation of gadolinium for ion therapy: a Monte Carlo study of charged particle beams. <i>Scientific Reports</i> , 2020, 10, 13417.	1.6	8
25	Spectroscopic analysis of irradiated radiochromic EBT-XD films in proton and photon beams. <i>Physics in Medicine and Biology</i> , 2020, 65, 205002.	1.6	8
26	Retrospective radiation dosimetry using electron paramagnetic resonance in canine dental enamel. <i>Applied Radiation and Isotopes</i> , 2005, 62, 173-179.	0.7	7
27	An empirical model of electronic portal imager response implemented within a commercial treatment planning system for verification of intensity-modulated radiation therapy fields. <i>Journal of Applied Clinical Medical Physics</i> , 2008, 9, 135-150.	0.8	7
28	Factors influencing intrafractional target shifts in lung stereotactic body radiation therapy. <i>Practical Radiation Oncology</i> , 2014, 4, e45-e51.	1.1	7
29	Development of multi-pixel x-ray source using oxide-coated cathodes. <i>Physics in Medicine and Biology</i> , 2017, 62, N320-N336.	1.6	7
30	The impact of mass density variations on an electron Monte Carlo algorithm for radiotherapy dose calculations. <i>Physics and Imaging in Radiation Oncology</i> , 2018, 8, 1-7.	1.2	7
31	Influence of 0.35 T magnetic field on the response of EBT3 and EBT-XD radiochromic films. <i>Medical Physics</i> , 2020, 47, 4543-4552.	1.6	7
32	An open-source genetic algorithm for determining optimal seed distributions for low-dose-rate prostate brachytherapy. <i>Brachytherapy</i> , 2015, 14, 692-702.	0.2	6
33	Design and numerical simulations of W-diamond transmission target for distributed x-ray sources. <i>Biomedical Physics and Engineering Express</i> , 2019, 5, 025030.	0.6	6
34	Is tissue harmonic ultrasound imaging (THI) of the prostatic urethra and rectum superior to brightness (B) mode imaging? An observer study. <i>Physica Medica</i> , 2014, 30, 662-668.	0.4	5
35	A pre-clinical phantom comparison of tissue harmonic and brightness mode imaging for application in ultrasound guided prostate brachytherapy. <i>Physica Medica</i> , 2011, 27, 153-162.	0.4	4
36	Neutron measurements with a CdTe spectrometer on a proton therapy unit. <i>Radiation Measurements</i> , 2020, 135, 106377.	0.7	4

#	ARTICLE	IF	CITATIONS
37	Development of a residency program in radiation oncology physics: an inverse planning approach. Journal of Applied Clinical Medical Physics, 2016, 17, 573-582.	0.8	3
38	Role of Volumetric-Modulated Arc Therapy with Flattening Filter Free Delivery in Lung Stereotactic Body Radiotherapy. Journal of Medical Imaging and Radiation Sciences, 2016, 47, 155-159.	0.2	3
39	Simultaneous optimization of mixed photon energy beams in volumetric modulated arc therapy. Medical Physics, 2019, 46, 3844-3863.	1.6	3
40	Investigating neutron activated contrast agent imaging for tumor localization in proton therapy: a feasibility study for proton neutron gamma-x detection (PNGXD). Physics in Medicine and Biology, 2020, 65, 035005.	1.6	3
41	Radiobiological impact of gadolinium neutron capture from proton therapy and alternative neutron sources using TOPAS+Bio. Medical Physics, 2021, 48, 4004-4016.	1.6	3
42	Survival was Significantly Better with Surgical/Medical/Radiation Co-interventions in a Single-Institution Practice Audit of Frameless Stereotactic Radiosurgery. Cureus, 2016, 8, e612.	0.2	3
43	Comprehensive fluence delivery optimization with multileaf collimation. Biomedical Physics and Engineering Express, 2018, 4, 025021.	0.6	2
44	Photon beam energy dependent single-arc volumetric modulated arc optimization. Physica Medica, 2021, 82, 122-133.	0.4	2
45	Spectroscopic characterization of radiochromic films for radiation therapy dosimetry. , 2019, , .		2
46	Implementation of Lung Stereotactic Ablative Radiotherapy at a Regional Cancer Centre. Journal of Medical Imaging and Radiation Sciences, 2012, 43, 245-252.	0.2	1
47	Poster - Thur Eve - 12: Dosimetric manifestation of harmonic mode imaging for seed implant brachytherapy. Medical Physics, 2012, 39, 4626-4626.	1.6	0
48	A preliminary study on the effect of modulated photon radiotherapy (XMRT) optimization for prostate cancer treatment planning. IFMBE Proceedings, 2015, , 417-420.	0.2	0
49	Poster - Thur Eve - 58: Dosimetric validation of electronic compensation for radiotherapy treatment planning. Medical Physics, 2014, 41, 18-19.	1.6	0
50	Poster - 52: Smoothing constraints in Modulated Photon Radiotherapy (XMRT) fluence map optimization. Medical Physics, 2016, 43, 4949-4949.	1.6	0
51	Sci-Sat AM: Radiation Dosimetry and Practical Therapy Solutions - 04: On 3D Fabrication of Phantoms and Experimental Verification of Patient Dose Computation Algorithms. Medical Physics, 2016, 43, 4959-4959.	1.6	0
52	Optical spectral analysis of radiochromic films irradiated with radiation therapy beams. , 2020, , .		0
53	Growth kinetics of the EBT3 and EBT-XD films response in radiotherapy beams. , 2020, , .		0