

Scott B Crowe

List of Publications by Year in descending order

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Version: 2024-02-01

109
papers

1,347
citations

364017

20
h-index

435775

31
g-index

117
all docs

117
docs citations

117
times ranked

1012
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | RSC: A 3D printed eyeball phantom for Sr-90 dosimetry measurements. Journal of Physics: Conference Series, 2022, 2167, 012018. | 0.4 | 0 |
| 2 | Evaluation of optical 3D scanning system for radiotherapy use. Journal of Medical Radiation Sciences, 2022, 69, 218-226. | 1.5 | 7 |
| 3 | A publicly available dataset of out-of-field dose profiles of a 6 MV linear accelerator. Physical and Engineering Sciences in Medicine, 2022, , 1. | 2.3 | 0 |
| 4 | Development of a customisable 3D-printed intra-oral stent for head-and-neck radiotherapy. Technical Innovations and Patient Support in Radiation Oncology, 2022, 23, 1-7. | 2.1 | 3 |
| 5 | Predicting the required thickness of custom shielding materials in kilovoltage radiotherapy beams. Physica Medica, 2021, 81, 94-101. | 0.7 | 5 |
| 6 | Effects of gas-filled temporary breast tissue expanders on radiation dose from modulated rotational photon beams. Medical Dosimetry, 2021, 46, 13-20. | 0.9 | 4 |
| 7 | Recommendations for simulating and measuring with biofabricated lung equivalent materials based on atomic composition analysis. Physical and Engineering Sciences in Medicine, 2021, 44, 331-335. | 2.3 | 3 |
| 8 | Comparison of global and local gamma evaluation results using isodose levels. Physical and Engineering Sciences in Medicine, 2021, 44, 201-206. | 2.3 | 3 |
| 9 | ASSESSMENT OF INTEGRITY AND LEAD-EQUIVALENCE OF SHIELDED GARMENTS USING TWO-DIMENSIONAL X-RAY IMAGES FROM A COMPUTED TOMOGRAPHY SCANNER. Radiation Protection Dosimetry, 2021, 193, 155-164. | 0.8 | 0 |
| 10 | Technical Note: Small field dose correction factors for radiochromic film in lung phantoms. Medical Physics, 2021, 48, 2667-2672. | 3.1 | 5 |
| 11 | Measuring foetal dose from tomotherapy treatments. Medical Dosimetry, 2021, 46, 342-346. | 0.9 | 2 |
| 12 | Dosimetric evaluation of a patient-specific 3D-printed oral positioning stent for head-and-neck radiotherapy. Physical and Engineering Sciences in Medicine, 2021, 44, 887-899. | 2.3 | 4 |
| 13 | 3D printed brachytherapy jig for Reference Air Kerma Rate calibration. Physical and Engineering Sciences in Medicine, 2021, 44, 1141-1150. | 2.3 | 0 |
| 14 | Determining tolerance levels for quality assurance of 3D printed bolus for modulated arc radiotherapy of the nose. Physical and Engineering Sciences in Medicine, 2021, 44, 1187-1199. | 2.3 | 7 |
| 15 | Report of the ACPSEM radiation oncology medical physics workforce modelling project task group. Physical and Engineering Sciences in Medicine, 2021, 44, 1013-1025. | 2.3 | 5 |
| 16 | Departmental action limits for TQA energy variations defined by means of statistical process control methods. Physical and Engineering Sciences in Medicine, 2020, 43, 29-34. | 2.3 | 0 |
| 17 | In vivo monitoring of total skin electron dose using optically stimulated luminescence dosimeters. Reports of Practical Oncology and Radiotherapy, 2020, 25, 35-40. | 0.7 | 6 |
| 18 | Investigating the use of aperture shape controller in VMAT treatment deliveries. Medical Dosimetry, 2020, 45, 284-292. | 0.9 | 11 |

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|----|---|-----|-----------|
| 19 | Exploring the gamma surface: A new method for visualising modulated radiotherapy quality assurance results. <i>Physica Medica</i> , 2020, 78, 166-172. | 0.7 | 2 |
| 20 | Clinical implementation of a Monte Carlo based independent TPS dose checking system. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 1113-1123. | 2.3 | 9 |
| 21 | Monte Carlo calculations of radiotherapy dose in "inhomogeneous" anatomy. <i>Physica Medica</i> , 2020, 78, 156-165. | 0.7 | 4 |
| 22 | Characteristics of inverse gamma histograms. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 659-664. | 2.3 | 1 |
| 23 | A review of stereotactic body radiotherapy for the spine. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 799-824. | 2.3 | 5 |
| 24 | Assessing the fit of 3D printed bolus from CT, optical scanner and photogrammetry methods. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 601-607. | 2.3 | 11 |
| 25 | Monte Carlo calculated output correction factors for Gafchromic EBT3 film for relative dosimetry in small stereotactic radiosurgery fields. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 609-616. | 2.3 | 6 |
| 26 | Quasi-simultaneous 3D printing of muscle-, lung- and bone-equivalent media: a proof-of-concept study. <i>Physical and Engineering Sciences in Medicine</i> , 2020, 43, 701-710. | 2.3 | 33 |
| 27 | Impact of radiopacified bone cement on radiotherapy dose calculation. <i>Physics and Imaging in Radiation Oncology</i> , 2020, 14, 12-16. | 2.9 | 4 |
| 28 | Technical note: A modified gamma evaluation method for dose distribution comparisons. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 193-200. | 1.9 | 7 |
| 29 | Conservatism in linear accelerator bunker shielding. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2019, 42, 781-787. | 1.3 | 8 |
| 30 | Linear accelerator bunker shielding for stereotactic radiotherapy. <i>Physics in Medicine and Biology</i> , 2019, 64, 21NT04. | 3.0 | 4 |
| 31 | Analysis of dose comparison techniques for patient-specific quality assurance in radiation therapy. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 189-198. | 1.9 | 13 |
| 32 | A very low diffusion Fricke gel dosimeter with functionalised xylenol orange-PVA (XOPVA). <i>Physics in Medicine and Biology</i> , 2019, 64, 205017. | 3.0 | 12 |
| 33 | Retrospective analysis of breast radiotherapy treatment plans: Curating the "non-curated". <i>Journal of Medical Imaging and Radiation Oncology</i> , 2019, 63, 517-529. | 1.8 | 3 |
| 34 | Distributive quality assurance and delivery of stereotactic ablative radiotherapy treatments amongst beam matched linear accelerators: A feasibility study. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 99-105. | 1.9 | 12 |
| 35 | Application of retrospective data analysis to clinical protocol design: can the potential benefits of breath-hold techniques for breast radiotherapy be assessed without testing on patients?. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2019, 42, 227-233. | 1.3 | 5 |
| 36 | A multi-institutional evaluation of machine performance check system on treatment beam output and symmetry using statistical process control. <i>Journal of Applied Clinical Medical Physics</i> , 2019, 20, 71-80. | 1.9 | 22 |

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|----|---|-----|-----------|
| 37 | Effect of arc length on skin dose from hypofractionated volumetric modulated arc radiotherapy treatments of the lung and spine. <i>Medical Dosimetry</i> , 2019, 44, 309-314. | 0.9 | 2 |
| 38 | A method for obtaining three-dimensional measurements of HDR brachytherapy dose distributions using Fricke gel dosimeters and optical computed tomography. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2019, 42, 221-226. | 1.3 | 4 |
| 39 | Optically Stimulated Luminescence Dosimeters as an Alternative to Radiographic Film for Performing "Head-Wrap" Linac Leakage Measurements. <i>IFMBE Proceedings</i> , 2019, , 553-555. | 0.3 | 3 |
| 40 | Radiotherapy Quality Assurance Using Statistical Process Control. <i>IFMBE Proceedings</i> , 2019, , 437-442. | 0.3 | 5 |
| 41 | Optimising a Radiotherapy Optical Surface Monitoring System to Account for the Effects of Patient Skin Contour and Skin Colour. <i>IFMBE Proceedings</i> , 2019, , 451-454. | 0.3 | 1 |
| 42 | Stereotactic Radiosurgery for Multiple Brain Metastases: A Dose-Volume Study. <i>IFMBE Proceedings</i> , 2019, , 443-446. | 0.3 | 0 |
| 43 | Long-Term Reliability of Optically Stimulated Luminescence Dosimeters. <i>IFMBE Proceedings</i> , 2019, , 561-564. | 0.3 | 3 |
| 44 | Calibration Seed Sampling for Iodine-125 Prostate Brachytherapy. <i>IFMBE Proceedings</i> , 2019, , 459-462. | 0.3 | 0 |
| 45 | Radiotherapy Dose Measurements Using a Fluorescing Quinine Solution. <i>IFMBE Proceedings</i> , 2019, , 545-548. | 0.3 | 0 |
| 46 | Accuracy and efficiency of published film dosimetry techniques using a flat-bed scanner and EBT3 film. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2018, 41, 117-128. | 1.3 | 13 |
| 47 | Utilising the Virtual Environment for Radiotherapy Training System to Support Undergraduate Teaching of IMRT, VMAT, DCAT Treatment Planning, and QA Concepts. <i>Journal of Medical Imaging and Radiation Sciences</i> , 2018, 49, 31-38. | 0.3 | 24 |
| 48 | Photon optimizer (PO) vs progressive resolution optimizer (PRO): a conformity- and complexity-based comparison for intensity-modulated arc therapy plans. <i>Medical Dosimetry</i> , 2018, 43, 267-275. | 0.9 | 23 |
| 49 | Xylenol orange functionalised polymers to overcome diffusion in Fricke gel radiation dosimeters. <i>Reactive and Functional Polymers</i> , 2018, 132, 81-88. | 4.2 | 16 |
| 50 | Characterisation of radiological properties of a brachytherapy moulding material. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2018, 41, 731-737. | 1.3 | 1 |
| 51 | Improving accuracy for stereotactic body radiotherapy treatments of spinal metastases. <i>Journal of Applied Clinical Medical Physics</i> , 2018, 19, 453-462. | 1.9 | 4 |
| 52 | A simple method to account for skin dose enhancement during treatment planning of VMAT treatments of patients in contact with immobilization equipment. <i>Journal of Applied Clinical Medical Physics</i> , 2018, 19, 239-245. | 1.9 | 8 |
| 53 | Tomotherapy treatment site specific planning using statistical process control. <i>Physica Medica</i> , 2018, 53, 32-39. | 0.7 | 8 |
| 54 | Wearable glass beads for in vivo dosimetry of total skin electron irradiation treatments. <i>Radiation Physics and Chemistry</i> , 2017, 140, 314-318. | 2.8 | 11 |

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|----|--|-----|-----------|
| 55 | Technical Note: Dose distributions in the vicinity of high-density implants using 3D gel dosimeters. <i>Medical Physics</i> , 2017, 44, 1545-1551. | 3.1 | 2 |
| 56 | Commissioning a hobby cutting device for radiochromic film preparation. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2017, 40, 449-453. | 1.3 | 3 |
| 57 | Radiological properties of 3D printed materials in kilovoltage and megavoltage photon beams. <i>Physica Medica</i> , 2017, 38, 111-118. | 0.7 | 86 |
| 58 | Statistical process control and verifying positional accuracy of a cobra motion couch using step-wedge quality assurance tool. <i>Journal of Applied Clinical Medical Physics</i> , 2017, 18, 70-79. | 1.9 | 11 |
| 59 | Investigating output and energy variations and their relationship to delivery QA results using Statistical Process Control for helical tomotherapy. <i>Physica Medica</i> , 2017, 38, 105-110. | 0.7 | 15 |
| 60 | Feasibility of 3D printed air slab diode caps for small field dosimetry. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2017, 40, 631-642. | 1.3 | 1 |
| 61 | Medical physics publishing in a changing research environment: the Australasian Physical & Engineering Sciences in Medicine 40th anniversary editorial. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2017, 40, 771-776. | 1.3 | 4 |
| 62 | Reduction of artefacts caused by missing ray-sum data in optical-CT imaging of implants in gel dosimeters. <i>Journal of Physics: Conference Series</i> , 2017, 847, 012070. | 0.4 | 0 |
| 63 | Can a commercial gel dosimetry system be used to verify stereotactic spinal radiotherapy treatment dose distributions?. <i>Journal of Physics: Conference Series</i> , 2017, 847, 012071. | 0.4 | 0 |
| 64 | Review of the clinical benefits and implementation of peer review of treatment plans in undergraduate medical dosimetry and radiation therapy training. <i>Journal of Radiotherapy in Practice</i> , 2017, 16, 85-91. | 0.5 | 0 |
| 65 | An experimental extrapolation technique using the Gafchromic EBT3 film for relative output factor measurements in small x-ray fields. <i>Medical Physics</i> , 2016, 43, 4687-4692. | 3.1 | 32 |
| 66 | Technical Note: Calibrating radiochromic film in beams of uncertain quality. <i>Medical Physics</i> , 2016, 43, 5647-5652. | 3.1 | 10 |
| 67 | Technical Note: Relationships between gamma criteria and action levels: Results of a multicenter audit of gamma agreement index results. <i>Medical Physics</i> , 2016, 43, 1501-1506. | 3.1 | 38 |
| 68 | Dosimetric quality, accuracy, and deliverability of modulated radiotherapy treatments for spinal metastases. <i>Medical Dosimetry</i> , 2016, 41, 258-266. | 0.9 | 10 |
| 69 | Effects of inaccurate small field dose measurements on calculated treatment doses. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2016, 39, 747-753. | 1.3 | 16 |
| 70 | Measuring dose from radiotherapy treatments in the vicinity of a cardiac pacemaker. <i>Physica Medica</i> , 2016, 32, 1529-1536. | 0.7 | 18 |
| 71 | Bulk evaluation and comparison of radiotherapy treatment plans for breast cancer. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2016, 39, 633-644. | 1.3 | 3 |
| 72 | Monitoring Daily QA 3 constancy for routine quality assurance on linear accelerators. <i>Physica Medica</i> , 2016, 32, 1479-1487. | 0.7 | 18 |

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|----|---|-----|-----------|
| 73 | Investigating the use of image thresholding in brachytherapy catheter reconstruction. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 913-919. | 1.3 | 9 |
| 74 | Women in medical physics: a preliminary analysis of workforce and research participation in Australia and New Zealand. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 525-532. | 1.3 | 11 |
| 75 | Use of electronic portal imaging devices for electron treatment verification. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 199-209. | 1.3 | 2 |
| 76 | A virtual radiation therapy workflow training simulation. Radiography, 2016, 22, e59-e63. | 2.2 | 32 |
| 77 | Technical Note: Preliminary investigations into the use of a functionalised polymer to reduce diffusion in Fricke gel dosimeters. Medical Physics, 2015, 42, 6798-6803. | 3.1 | 24 |
| 78 | PAGAT gel dosimeters for dose distribution measurements in the vicinity of high-density implants: A preliminary study. Journal of Physics: Conference Series, 2015, 573, 012061. | 0.4 | 2 |
| 79 | Characterisation of the half-field beam penumbra for a variety of blocking set-ups. Journal of Physics: Conference Series, 2015, 573, 012073. | 0.4 | 2 |
| 80 | Photon beam dose distributions for patients with implanted temporary tissue expanders. Journal of Physics: Conference Series, 2015, 573, 012062. | 0.4 | 0 |
| 81 | A reduction of diffusion in PVA Fricke hydrogels. Journal of Physics: Conference Series, 2015, 573, 012046. | 0.4 | 8 |
| 82 | Establishing the impact of temporary tissue expanders on electron and photon beam dose distributions. Physica Medica, 2015, 31, 281-285. | 0.7 | 10 |
| 83 | Examination of the properties of IMRT and VMAT beams and evaluation against pre-treatment quality assurance results. Physics in Medicine and Biology, 2015, 60, 2587-2601. | 3.0 | 53 |
| 84 | Clinical use of diodes and micro-chambers to obtain accurate small field output factor measurements. Australasian Physical and Engineering Sciences in Medicine, 2015, 38, 357-367. | 1.3 | 16 |
| 85 | Use of 3D Printed Materials as Tissue-Equivalent Phantoms. IFMBE Proceedings, 2015, , 728-731. | 0.3 | 30 |
| 86 | Suitability of Diodes for Point Dose Measurements in IMRT/VMAT Beams. IFMBE Proceedings, 2015, , 657-660. | 0.3 | 1 |
| 87 | The influence of Monte Carlo source parameters on detector design and dose perturbation in small field dosimetry. Journal of Physics: Conference Series, 2014, 489, 012006. | 0.4 | 3 |
| 88 | Using narrow beam profiles to quantify focal spot size, for accurate Monte Carlo simulations of SRS/SRT systems. Journal of Physics: Conference Series, 2014, 489, 012014. | 0.4 | 2 |
| 89 | Design and experimental testing of air slab caps which convert commercial electron diodes into dual purpose, correction-free diodes for small field dosimetry. Medical Physics, 2014, 41, 101701. | 3.1 | 16 |
| 90 | Dosimetry of cone-defined stereotactic radiosurgery fields with a commercial synthetic diamond detector. Medical Physics, 2014, 41, 111702. | 3.1 | 55 |

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|-----|--|-----|-----------|
| 91 | A practical and theoretical definition of very small field size for radiotherapy output factor measurements. <i>Medical Physics</i> , 2014, 41, 041707. | 3.1 | 71 |
| 92 | Response variation of optically stimulated luminescence dosimeters. <i>Radiation Measurements</i> , 2014, 61, 21-24. | 1.4 | 9 |
| 93 | A comparison of surface doses for very small field size x-ray beams: Monte Carlo calculations and radiochromic film measurements. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2014, 37, 303-309. | 1.3 | 37 |
| 94 | Treatment plan complexity metrics for predicting IMRT pre-treatment quality assurance results. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2014, 37, 475-482. | 1.3 | 66 |
| 95 | Predicting the likelihood of QA failure using treatment plan accuracy metrics. <i>Journal of Physics: Conference Series</i> , 2014, 489, 012051. | 0.4 | 23 |
| 96 | The appearance and effects of metallic implants in CT images. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2013, 36, 209-217. | 1.3 | 12 |
| 97 | Monte Carlo-based diode design for correction-less small field dosimetry. <i>Physics in Medicine and Biology</i> , 2013, 58, 4501-4512. | 3.0 | 50 |
| 98 | Retrospective evaluation of dosimetric quality for prostate carcinomas treated with 3D conformal, intensity modulated and volumetric modulated arc radiotherapy. <i>Journal of Medical Radiation Sciences</i> , 2013, 60, 131-138. | 1.5 | 24 |
| 99 | Correcting radiation survey data to account for increased leakage during intensity modulated radiotherapy treatments. <i>Medical Physics</i> , 2013, 40, 111708. | 3.1 | 7 |
| 100 | Dosimetric effects of a high-density spinal implant. <i>Journal of Physics: Conference Series</i> , 2013, 444, 012108. | 0.4 | 8 |
| 101 | Monte Carlo evaluation of collapsed-cone convolution calculations in head and neck radiotherapy treatment plans. <i>IFMBE Proceedings</i> , 2013, , 1803-1806. | 0.3 | 8 |
| 102 | The effect of very small air gaps on small field dosimetry. <i>Physics in Medicine and Biology</i> , 2012, 57, 6947-6960. | 3.0 | 36 |
| 103 | Monte Carlo verification of gel dosimetry measurements for stereotactic radiotherapy. <i>Physics in Medicine and Biology</i> , 2012, 57, 3359-3369. | 3.0 | 17 |
| 104 | Investigation of stereotactic radiotherapy dose using dosimetry film and Monte Carlo simulations. <i>Radiation Measurements</i> , 2011, 46, 1985-1988. | 1.4 | 11 |
| 105 | Technical Note: Modeling a complex micro-multileaf collimator using the standard BEAMnrc distribution. <i>Medical Physics</i> , 2010, 37, 1761-1767. | 3.1 | 23 |
| 106 | Internal calibration of gel dosimeters: A feasibility study. <i>Journal of Physics: Conference Series</i> , 2009, 164, 012014. | 0.4 | 5 |
| 107 | Effects of collimator backscatter in an Elekta linac by Monte Carlo simulation. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2009, 32, 129-135. | 1.3 | 10 |
| 108 | THE DEVELOPMENT OF A MONTE CARLO SYSTEM TO VERIFY RADIOTHERAPY TREATMENT DOSE CALCULATIONS. <i>Radiotherapy and Oncology</i> , 2009, 92, S71. | 0.6 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Webinar and survey on quality management principles within the Australian and New Zealand ACPSEM Workforce. Physical and Engineering Sciences in Medicine, 0, , . | 2.3 | 0 |