# Brigitte Reniers

List of Publications by Year
in descending order



| 88 | 1,478 | 361413 | 330143 |
|---|---|---|---|
| papers | citations | 20 h-index | 37 g-index |

| 88 | 88 | 88 | 1413 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Spectroscopic characterization of a novel electronic brachytherapy system. Physics in Medicine and Biology, 2008, 53, 61-75. | 3.0 | 252 |
| 2 | Extracting atomic numbers and electron densities from a dual source dual energy CT scanner: Experiments and a simulation model. Radiotherapy and Oncology, 2011, 100, 375-379. | 0.6 | 82 |
| 3 | Sensitivity of low energy brachytherapy Monte Carlo dose calculations to uncertainties in human tissue composition. Medical Physics, 2010, 37, 5188-5198. | 3.0 | 77 |
| 4 | Postimplant Dosimetry Using a Monte Carlo Dose Calculation Engine: A New Clinical Standard. International Journal of Radiation Oncology Biology Physics, 2007, 68, 1190-1198. | 0.8 | 69 |
| 5 | The radial dose function of low-energy brachytherapy seeds in different solid phantoms: comparison between calculations with the EGSnrc and MCNP4C Monte Carlo codes and measurements. Physics in Medicine and Biology, 2004, 49, 1569-1582. | 3.0 | 67 |
| 6 | Dosimetric and microdosimetric study of contrast-enhanced radiotherapy with kilovolt x-rays. Physics in Medicine and Biology, 2005, 50, 3555-3569. | 3.0 | 62 |
| 7 | ALGEBRA: ALgorithm for the heterogeneous dosimetry based on GEANT4 for BRAchytherapy. Physics in Medicine and Biology, 2012, 57, 3273-3280. | 3.0 | 58 |
| 8 | Simulation study on potential accuracy gains from dual energy CT tissue segmentation for low-energy brachytherapy Monte Carlo dose calculations. Physics in Medicine and Biology, 2011, 56, 6257-6278. | 3.0 | 57 |
| 9 | Calculation of relative biological effectiveness of a low-energy electronic brachytherapy source. Physics in Medicine and Biology, 2008, 53, 7125-7135. | 3.0 | 44 |
| 10 | The difference of scoring dose to water or tissues in Monte Carlo dose calculations for low energy brachytherapy photon sources. Medical Physics, 2011, 38, 1526-1533. | 3.0 | 39 |
| 11 | Dosimetric characterization of a novel intracavitary mold applicator for Ir192 high dose rate endorectal brachytherapy treatment. Medical Physics, 2006, 33, 4515-4526. | 3.0 | 38 |
| 12 | Influence of breast composition and interseed attenuation in dose calculations for post-implant assessment of permanent breast<sup>103</sup>Pd seed implant. Physics in Medicine and Biology, 2010, 55, 4547-4561. | 3.0 | 36 |
| 13 | Monte Carlo study of LDR seed dosimetry with an application in a clinical brachytherapy breast implant. Medical Physics, 2009, 36, 1848-1858. | 3.0 | 31 |
| 14 | Online pretreatment verification of high-dose rate brachytherapy using an imaging panel. Physics in Medicine and Biology, 2017, 62, 5440-5461. | 3.0 | 31 |
| 15 | Residual metabolic tumor activity after chemo-radiotherapy is mainly located in initially high FDG uptake areas in rectal cancer. Radiotherapy and Oncology, 2011, 99, 137-141. | 0.6 | 30 |
| 16 | Comparison of TG-43 and TG-186 in breast irradiation using a low energy electronic brachytherapy source. Medical Physics, 2014, 41, 061701. | 3.0 | 29 |
| 17 | Dosimetric study of the new InterSource125iodine seed. Medical Physics, 2001, 28, 2285-2288. | 3.0 | 27 |
| 18 | In vivo dosimetry for gynaecological brachytherapy using a novel position sensitive radiation detector: Feasibility study. Medical Physics, 2012, 39, 1925-1935. | 3.0 | 24 |

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|---|---|---|---|
| 19 | Microdosimetric Analysis of Various Mammography Spectra: Lineal Energy Distributions and Ionization Cluster Analysis. Radiation Research, 2004, 162, 592-599. | 1.5 | 23 |
| 20 | Preclinical Assessment of Efficacy of Radiation Dose Painting Based on Intratumoral FDG-PET Uptake. Clinical Cancer Research, 2015, 21, 5511-5518. | 7.0 | 23 |
| 21 | Dosimetric study of a new palladium seed. Applied Radiation and Isotopes, 2002, 57, 805-811. | 1.5 | 20 |
| 22 | Multicentre treatment planning study of MRI-guided brachytherapy for cervical cancer: Comparison between tandem-ovoid applicator users. Radiotherapy and Oncology, 2013, 107, 82-87. | 0.6 | 20 |
| 23 | A comparison of the relative biological effectiveness of low energy electronic brachytherapy sources in breast tissue: a Monte Carlo study. Physics in Medicine and Biology, 2016, 61, 383-399. | 3.0 | 20 |
| 24 | Clinical implementation of a digital tomosynthesisâ€based seed reconstruction algorithm for intraoperative postimplant dose evaluation in low dose rate prostate brachytherapy. Medical Physics, 2009, 36, 5235-5244. | 3.0 | 19 |
| 25 | Influence of trace elements in human tissue in low-energy photon brachytherapy dosimetry. Physics in Medicine and Biology, 2012, 57, 3585-3596. | 3.0 | 19 |
| 26 | The contribution from transit dose for192Ir HDR brachytherapy treatments. Physics in Medicine and Biology, 2014, 59, 1831-1844. | 3.0 | 19 |
| 27 | HDR <sup>192</sup>Ir source speed measurements using a high speed video camera. Medical Physics, 2015, 42, 412-415. | 3.0 | 17 |
| 28 | Theoretical analysis of microdosimetric spectra and cluster formation for103Pd and125I photon emitters. Physics in Medicine and Biology, 2004, 49, 3781-3795. | 3.0 | 16 |
| 29 | A medical image-based graphical platformâ€"Features, applications and relevance for brachytherapy. Brachytherapy, 2014, 13, 632-639. | 0.5 | 16 |
| 30 | Relative biologic effectiveness in terms of tumor response of 125I implants compared with 60Co gamma rays. International Journal of Radiation Oncology Biology Physics, 2005, 63, 224-229. | 0.8 | 14 |
| 31 | Dose specification for<sup>192</sup>Ir high dose rate brachytherapy in terms of dose-to-water-in-medium and dose-to-medium-in-medium. Physics in Medicine and Biology, 2015, 60, 4565-4579. | 3.0 | 14 |
| 32 | The microdosimetry of low-energy photons in radiotherapy. Radiation Protection Dosimetry, 2006, 122, 401-403. | 0.8 | 13 |
| 33 | Tissue modeling schemes in low energy breast brachytherapy. Physics in Medicine and Biology, 2011, 56, 7045-7060. | 3.0 | 13 |
| 34 | Cone Beam CT-Based Three-Dimensional Planning in High-Dose-Rate Brachytherapy for Cervical Cancer. International Journal of Radiation Oncology Biology Physics, 2010, 77, 1092-1097. | 0.8 | 12 |
| 35 | High dose rate and flattening filter free irradiation can be safely implemented in clinical practice. International Journal of Radiation Biology, 2015, 91, 778-785. | 1.8 | 12 |
| 36 | The effect of gamma radiation on the mechanical and microstructural properties of Fe-rich inorganic polymers. Journal of Nuclear Materials, 2019, 521, 126-136. | 2.7 | 11 |

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|---|---|---|---|
| 37 | Comparison of dose calculation algorithms for colorectal cancer brachytherapy treatment with a shielded applicator. Medical Physics, 2008, 35, 4824-4830. | 3.0 | 10 |
| 38 | Dose perturbation due to catheter materials in high-dose-rate interstitial 192Ir brachytherapy. Brachytherapy, 2014, 13, 627-631. | 0.5 | 10 |
| 39 | Mechanical evaluation of the Bravos afterloader system for HDR brachytherapy. Brachytherapy, 2019, 18, 852-862. | 0.5 | 9 |
| 40 | Optimization of a breast implant in Brachytherapy PDR. Validation with Monte Carlo simulation and measurements with TLDs and GafChromic films. Radiotherapy and Oncology, 2005, 76, 326-333. | 0.6 | 7 |
| 41 | Dose reduction in LDR brachytherapy by implanted prostate gold fiducial markers. Medical Physics, 2012, 39, 1410-1417. | 3.0 | 7 |
| 42 | Consequences of dose heterogeneity on the biological efficiency of103Pd permanent breast seed implants. Physics in Medicine and Biology, 2012, 57, 809-823. | 3.0 | 7 |
| 43 | The use of tetrahedral mesh geometries in Monte Carlo simulation of applicator based brachytherapy dose distributions. Physics in Medicine and Biology, 2014, 59, 5921-5935. | 3.0 | 7 |
| 44 | What Level of Accuracy Is Achievable for Preclinical Dose Painting Studies on a Clinical Irradiation Platform?. Radiation Research, 2015, 183, 501. | 1.5 | 7 |
| 45 | Dose distribution for gynecological brachytherapy with dose accumulation between insertions: Feasibility study. Brachytherapy, 2016, 15, 504-513. | 0.5 | 7 |
| 46 | A novel rectal applicator for contact radiotherapy with HDR 192Ir sources. Brachytherapy, 2018, 17, 1037-1044. | 0.5 | 7 |
| 47 | The effect of different lower detection thresholds in microdosimetric spectra and their mean values. Radiation Measurements, 2021, 146, 106626. | 1.4 | 7 |
| 48 | A deep learning and Monte Carlo based framework for bioluminescence imaging center of mass-guided glioblastoma targeting. Physics in Medicine and Biology, 2022, 67, 144003. | 3.0 | 7 |
| 49 | Technical Note: Cone beam CT imaging for 3D image guided brachytherapy for gynecological HDR brachytherapy. Medical Physics, 2011, 38, 2762-2767. | 3.0 | 4 |
| 50 | Advanced design, simulation, and dosimetry of a novel rectal applicator for contact brachytherapy with a conventional HDR 192Ir source. Brachytherapy, 2020, 19, 544-553. | 0.5 | 4 |
| 51 | Validation of TOPAS MC for modelling the efficiency of an extended-range coaxial p-type HPGe detector. Applied Radiation and Isotopes, 2021, 173, 109699. | 1.5 | 4 |
| 52 | MO-AB-BRA-03: Development of Novel Real Time in Vivo EPID Treatment Verification for Brachytherapy. Medical Physics, 2016, 43, 3691-3691. | 3.0 | 4 |
| 53 | Measurement of absorbed dose to water around an electronic brachytherapy source. Comparison of two dosimetry systems: lithium formate EPR dosimeters and radiochromic EBT2 film. Physics in Medicine and Biology, 2015, 60, 3869-3882. | 3.0 | 3 |
| 54 | The use of Cone Beam CT-based Three-dimensional Planning in Intracavitary Brachytherapy for Cervical Cancer. International Journal of Radiation Oncology Biology Physics, 2008, 72, S583. | 0.8 | 2 |

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|---|---|---|---|
| 55 | Monte Carlo iodine brachytherapy dosimetry: study for a clinical application. Journal of Physics: Conference Series, 2008, 102, 012011. | 0.4 | 2 |
| 56 | 3D Dose Distribution for GYN with Dose Accumulation between Insertions: Feasibility Study. Brachytherapy, 2013, 12, S22. | 0.5 | 2 |
| 57 | SU-FF-T-406: Toward a More Accurate Dose Calculation Technique Using a Semiautomatic Organ Contouring in Monte Carlo Post-Implant Assessment of Breast LDR Brachytherapy. Medical Physics, 2009, 36, 2615-2615. | 3.0 | 2 |
| 58 | 3D image-guided brachytherapy using cone beam CT. Brachytherapy, 2008, 7, 155-156. | 0.5 | 1 |
| 59 | 300 oral IN VIVO DOSIMETRY FOR GYNAECOLOGICAL BRACHYTHERAPY BASED ON A NOVEL RADPOS SYSTEM.. Radiotherapy and Oncology, 2011, 99, S118-S119. | 0.6 | 1 |
| 60 | Different Tissue Modeling Schemes in Post-implant Assessment ofÂBreast LDR Brachytherapy. Brachytherapy, 2011, 10, S32. | 0.5 | 1 |
| 61 | Theoretical versusEx VivoAssessment of Radiation Damage Repair: An Investigation in Normal Breast Tissue. Radiation Research, 2016, 185, 393-401. | 1.5 | 1 |
| 62 | MO-E-T-618-05: Monte Carlo Study of the Effect of the Tissue Composition On the Dosimetric Data Used for Low Energy Photons. Medical Physics, 2005, 32, 2069-2069. | 3.0 | 1 |
| 63 | Design of a Cylindrical Brachytherapy Implant Applicator for the Irradiation of an Intestinal Segment in Mice. Radiation Research, 2003, 159, 123-127. | 1.5 | 0 |
| 64 | 3D DOSE DISTRIBUTION FOR GYN WITH DOSE ACCUMULATION BETWEEN INSERTIONS: FEASIBILITY STUDY. Radiotherapy and Oncology, 2009, 92, S102. | 0.6 | 0 |
| 65 | USE OF ADVANCED DEFORMABLE REGISTRATION ALGORITHMS IN REPEATED FDG PET-CT IMAGING FOR RECTAL CANCER. Radiotherapy and Oncology, 2009, 92, S120. | 0.6 | 0 |
| 66 | 84 poster: 3D Image Guided Brachytherapy Using Cone Beam CT. Radiotherapy and Oncology, 2009, 91, S33. | 0.6 | 0 |
| 67 | 42 oral: The Role of Monte Carlo Simulation in Brachytherapy With Low-Energy Sources. Radiotherapy and Oncology, 2009, 91, S14-S15. | 0.6 | 0 |
| 68 | Breast Density Effect on Target and Skin Doses in 40 Breast 103pd Seed Implants Studied using a Semiautomatic Tissue Segmentation. International Journal of Radiation Oncology Biology Physics, 2010, 78, S252-S253. | 0.8 | 0 |
| 69 | 81 oral BREAST TISSUE MODELING IN MONTE CARLO POST-IMPLANT EVALUATION OF BREAST LDR BRACHYTHERAPY. Radiotherapy and Oncology, 2011, 99, S30-S31. | 0.6 | 0 |
| 70 | 108 oral DOSE TO MEDIUM AND WATER IN LOW ENERGY BRACHYTHERAPY. Radiotherapy and Oncology, 2011, 99, S41. | 0.6 | 0 |
| 71 | 147 oral MULTICENTRE STUDY OF MRI-GUIDED BRACHYTHERAPY TREATMENT PLANNING: COMPARISON AMONG TANDEM OVOID APPLICATOR USERS. Radiotherapy and Oncology, 2011, 99, S55. | 0.6 | 0 |
| 72 | 155 oral ON THE POTENTIAL OF DUAL ENERGY CT TISSUE SEGMENTATION IN LOW ENERGY BRACHYTHERAPY DOSE CALCULATIONS. Radiotherapy and Oncology, 2011, 99, S58-S59. | 0.6 | 0 |

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|---|---|---|---|
| 73 | Dosimetric Impact of Tissue Heterogeneity in Low Energy Accelerated Partial Breast Irradiation: A Monte Carlo Study. Brachytherapy, 2013, 12, S46. | 0.5 | 0 |
| 74 | Monte Carlo Simulation of HDR Ir-192 Brachytherapy Cancer Treatments. Brachytherapy, 2014, 13, S28. | 0.5 | 0 |
| 75 | SU-FF-T-364: Photo-Electric Effect with a Vengeance: Dosimetric and Microdosimetric Characterization of Contrast-Enhanced Radiation Therapy Using Kilovolt X-Rays. Medical Physics, 2005, 32, 2034-2034. | 3.0 | 0 |
| 76 | SU-FF-T-316: Measured and Calculated Dose Distribution Around 125I Brachytherapy Seeds in a Breast Phantom. Medical Physics, 2006, 33, 2119-2119. | 3.0 | 0 |
| 77 | SU-GG-T-05: MOSFET In-Vivo Dosimetry for Colorectal Cancer Patients Treated with Shielded Brachytherapy. Medical Physics, 2008, 35, 2727-2727. | 3.0 | 0 |
| 78 | SU-GG-T-508: Evaluation of the Monte Carlo Dose Calculation Engine of Eclipse Treatment Planning System for Electron Beams. Medical Physics, 2008, 35, 2841-2842. | 3.0 | 0 |
| 79 | SUâ€HHâ€AUD Câ€05: Low Dose Rate Prostate Brachytherapy: A Tomosynthesisâ€Based Intraâ€Operative Postâ€Implant Dose Evaluation. Medical Physics, 2008, 35, 2854-2854. | 3.0 | 0 |
| 80 | SU-GG-T-29: Introduction of the Cone Beam CT for 3D Image Guided GYN Brachytherapy. Medical Physics, 2008, 35, 2732-2732. | 3.0 | 0 |
| 81 | THâ€Câ€AUD Aâ€10: LDR Brachytherapy Dosimetry: Monte Carlo Code and TGâ€43 Comparisons. Medical Physics, 2008, 35, 2971-2971. | 3.0 | 0 |
| 82 | SU-FF-I-15: An Algorithm for Metal Streaking Artifact Reduction in Cone Beam CT. Medical Physics, 2009, 36, 2437-2737. | 3.0 | 0 |
| 83 | WE-D-BRB-08: Effects of Shielded Ovoids in HDR 192Ir Cervical Brachytherapy: A Monte Carlo Study Using Cone-Beam CT Images. Medical Physics, 2009, 36, 2773-2773. | 3.0 | 0 |
| 84 | SU-GG-T-496: The Sensitivity of BED and TCP Parameters to Dose Heterogeneity in Brachytherapy Treatments. Medical Physics, 2010, 37, 3301-3301. | 3.0 | 0 |
| 85 | TH-A-220-05: Evaluating the Impact of Dual Energy CT on LDR Brachytherapy Dose Calculations. Medical Physics, 2011, 38, 3846-3846. | 3.0 | 0 |
| 86 | SU-E-T-374: Use of the Novel RadPos System for In-Vivo Dose Verification in Gynaecological Brachytherapy Treatment. Medical Physics, 2011, 38, 3573-3573. | 3.0 | 0 |
| 87 | Prognostic value of chromosomal imbalancies and the colon gene expression signatures in rectal cancer.. Journal of Clinical Oncology, 2012, 30, 465-465. | 1.6 | 0 |
| 88 | SU-E-U-10: Ultrasound Based Deformable Image Registration: Daily CT Images Derived From Daily IGRT Ultrasound. Medical Physics, 2013, 40, 375-375. | 3.0 | 0 |