## Strahinja Stojadinovic

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5669551/publications.pdf

Version: 2024-02-01

92 papers 1,278 citations

394421 19 h-index 35 g-index

93 all docs 93
docs citations

times ranked

93

1600 citing authors

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Correlations of noninvasive BOLD and TOLD MRI with pO <sub>2</sub> and relevance to tumor radiation response. Magnetic Resonance in Medicine, 2014, 71, 1863-1873.  | 3.0 | 114       |
| 2  | A deep convolutional neural network-based automatic delineation strategy for multiple brain metastases stereotactic radiosurgery. PLoS ONE, 2017, 12, e0185844.   | 2.5 | 109       |
| 3  | MicroRTâ€"Small animal conformal irradiator. Medical Physics, 2007, 34, 4706-4716.  | 3.0 | 94        |
| 4  | The Importance of Dosimetry Standardization in Radiobiology. Journal of Research of the National Institute of Standards and Technology, 2013, 118, 403.   | 1.2 | 94        |
| 5  | Dynamics of the nematic phase of a bent-core liquid crystal. Physical Review E, 2002, 66, 060701.   | 2.1 | 89        |
| 6  | Critical behavior at the isotropic-to-nematic phase transition in a bent-core liquid crystal. Physical Review E, 2006, 73, 030703.  | 2.1 | 66        |
| 7  | Optical studies of the nematic phase of an oxazole-derived bent-core liquid crystal. Physical Review E, 2003, 68, 041704.   | 2.1 | 64        |
| 8  | Dosimetric characterization of an image-guided stereotactic small animal irradiator. Physics in Medicine and Biology, 2011, 56, 2585-2599.  | 3.0 | 56        |
| 9  | Developing oxygen-enhanced magnetic resonance imaging as a prognostic biomarker of radiation response. Cancer Letters, 2016, 380, 69-77.  | 7.2 | 55        |
| 10 | Progress toward a microradiation therapy small animal conformal irradiator. Medical Physics, 2006, 33, 3834-3845.   | 3.0 | 49        |
| 11 | Breaking bad IMRT QA practice. Journal of Applied Clinical Medical Physics, 2015, 16, 154-165.  | 1.9 | 43        |
| 12 | An x-ray image guidance system for small animal stereotactic irradiation. Physics in Medicine and Biology, 2010, 55, 7345-7362.   | 3.0 | 39        |
| 13 | Optically isotropic liquid-crystal phase of bent-core molecules with polar nanostructure. Physical Review E, 2005, 72, 021710.  | 2.1 | 37        |
| 14 | Feasibility of small animal cranial irradiation with the microRT system. Medical Physics, 2008, 35, 4735-4743.  | 3.0 | 33        |
| 15 | Genome-Wide Association Analysis of Radiation Resistance in Drosophila melanogaster. PLoS ONE, 2014, 9, e104858.  | 2.5 | 31        |
| 16 | Tumor physiological changes during hypofractionated stereotactic body radiation therapy assessed using multi-parametric magnetic resonance imaging. Oncotarget, 2017, 8, 37464-37477.   | 1.8 | 31        |
| 17 | Dosimetric comparison of Acuros XB with collapsed cone convolution/superposition and anisotropic analytic algorithm for stereotactic ablative radiotherapy of thoracic spinal metastases. Journal of Applied Clinical Medical Physics, 2015, 16, 181-192. | 1.9 | 26        |
| 18 | Stereotactic Radiosurgery for Multiple Brain Metastases From Renal-Cell Carcinoma. Clinical Genitourinary Cancer, 2019, 17, e273-e280.  | 1.9 | 25        |

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|----|---|-----|-----------|
| 19 | Automated high-dose rate brachytherapy treatment planning for a single-channel vaginal cylinder applicator. Physics in Medicine and Biology, 2017, 62, 4361-4374.   | 3.0 | 20        |
| 20 | Improved Survival Outcomes for Kidney Cancer Patients With Brain Metastases. Clinical Genitourinary Cancer, 2019, 17, e263-e272.  | 1.9 | 19        |
| 21 | Automatic metastatic brain tumor segmentation for stereotactic radiosurgery applications. Physics in Medicine and Biology, 2016, 61, 8440-8461.   | 3.0 | 18        |
| 22 | An athymic rat model of cutaneous radiation injury designed to study human tissue-based wound therapy. Radiation Oncology, 2012, 7, 68.   | 2.7 | 15        |
| 23 | Oxygen-Sensitive MRI: A Predictive Imaging Biomarker for Tumor Radiation Response?. International Journal of Radiation Oncology Biology Physics, 2021, 110, 1519-1529.  | 0.8 | 15        |
| 24 | Effects of clinical X-ray irradiation on UHMWPE films. Nuclear Instruments & Methods in Physics Research B, 2017, 410, 139-143.   | 1.4 | 14        |
| 25 | A webâ€based brain metastases segmentation and labeling platform for stereotactic radiosurgery.<br>Medical Physics, 2020, 47, 3263-3276.  | 3.0 | 12        |
| 26 | Partial Depletion of Regulatory T Cells Does Not Influence the Inflammation Caused by High Dose Hemi-Body Irradiation. PLoS ONE, 2013, 8, e56607.   | 2.5 | 11        |
| 27 | Reduced toxicity with equivalent outcomes using three-dimensional volumetric (3DV) image–based versus nonvolumetric point–based (NV) brachytherapy in a cervical cancer population. Brachytherapy, 2017, 16, 943-948. | 0.5 | 9         |
| 28 | Modeling Elekta VersaHD using the Varian Eclipse treatment planning system for photon beams: A singleâ€institution experience. Journal of Applied Clinical Medical Physics, 2019, 20, 33-42.                          | 1.9 | 8         |
| 29 | Deep-learning and radiomics ensemble classifier for false positive reduction in brain metastases segmentation. Physics in Medicine and Biology, 2022, 67, 025004.   | 3.0 | 8         |
| 30 | Effective Rat Lung Tumor Model for Stereotactic Body Radiation Therapy. Radiation Research, 2016, 185, 616-622.   | 1.5 | 7         |
| 31 | Tumor radioâ€sensitivity assessment by means of volume data and magnetic resonance indices measured on prostate tumor bearing rats. Medical Physics, 2016, 43, 1275-1284.   | 3.0 | 7         |
| 32 | MR-CBCT image-guided system for radiotherapy of orthotopic rat prostate tumors. PLoS ONE, 2018, 13, e0198065.   | 2.5 | 7         |
| 33 | Light Scattering Study of a Twist Grain Boundary Liquid Crystal. Physical Review Letters, 2003, 90, 035503.   | 7.8 | 6         |
| 34 | Real-Time Whole-Brain Radiation Therapy: AÂSingle-Institution Experience. International Journal of Radiation Oncology Biology Physics, 2018, 100, 1280-1288.  | 0.8 | 6         |
| 35 | A Mail Audit Independent Peer Review System for Dosimetry Verification of a Small Animal Irradiator.<br>Radiation Research, 2020, 193, 341.   | 1.5 | 5         |
| 36 | Considerations of target surface area and the risk of radiosurgical toxicity. PLoS ONE, 2019, 14, e0224047.   | 2.5 | 4         |

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|----|---|-----|-----------|
| 37 | Margin-Free Fractionated Stereotactic Radiation Therapy for Pediatric Brain Tumors. Practical Radiation Oncology, 2020, 10, e485-e494.  | 2.1 | 4         |
| 38 | Expanded Radiosurgery Capabilities Utilizing Gamma Knife Iconâ,,¢. Cureus, 2021, 13, e13998.  | 0.5 | 4         |
| 39 | MO-D-T-6E-09: Progress Towards a MicroRT Small Animal Conformal Irradiator. Medical Physics, 2005, 32, 2063-2063.   | 3.0 | 4         |
| 40 | TH-C-230A-08: A Prototype Rotational Immobilization System for a Proposed Static-Gantry MicroRT Device with Tomographic Capabilities. Medical Physics, 2006, 33, 2272-2272.                               | 3.0 | 4         |
| 41 | TH-C-224C-02: MicroRT/microRTP: A Conformal Small Animal Planning and Irradiation System. Medical Physics, 2006, 33, 2273-2273.   | 3.0 | 3         |
| 42 | A general algorithm for distributed treatments of multiple brain metastases. Medical Physics, 2021, 48, 1832-1838.  | 3.0 | 2         |
| 43 | MO-E-AUD C-07: Modeling Small Animal Micro Irradiator Orthovoltage Sources. Medical Physics, 2008, 35, 2877-2877.   | 3.0 | 2         |
| 44 | Evaluation of Acuros XB for SAbR Planning of Thoracic Spinal Tumors. International Journal of Radiation Oncology Biology Physics, 2013, 87, S733.   | 0.8 | 1         |
| 45 | Initial Experience With VMAT Plan and Delivery Verification Using a DICOM-RT Framework and Linac Delivery Log Files. International Journal of Radiation Oncology Biology Physics, 2014, 90, S886-S887.    | 0.8 | 1         |
| 46 | Inferior Critical Organ Dose-Profile in Non-Volumetric (Two-Dimensional) Versus Volumetric (Three-Dimensional) Brachytherapy May Predict for Greater Toxicity. Brachytherapy, 2015, 14, S83.              | 0.5 | 1         |
| 47 | The stepâ€andâ€shoot IMRT overshooting phenomenon: a novel method to mitigate patient overdosage. Journal of Applied Clinical Medical Physics, 2016, 17, 214-222.   | 1.9 | 1         |
| 48 | Technical Note: System for evaluating local hypothermia as a radioprotector of the rectum in a small animal model. Medical Physics, 2017, 44, 3932-3938.  | 3.0 | 1         |
| 49 | Dose rate determination for preclinical total body irradiation. Physics in Medicine and Biology, 2020, 65, 175018.  | 3.0 | 1         |
| 50 | SU-E-T-575: Independent Verification of VMAT Treatment Plans Using a DICOM-RT Framework. Medical Physics, 2013, 40, 337-337.  | 3.0 | 1         |
| 51 | SUâ€Câ€213â€07: Fabrication and Testing of a 3Dâ€Printed Small Animal Rectal Cooling Device to Evaluate Local Hypothermia as a Radioprotector During Prostate SBRT. Medical Physics, 2015, 42, 3189-3189. | 3.0 | 1         |
| 52 | Dose kernel decomposition for spotâ€based radiotherapy treatment planning. Medical Physics, 2022, 49, 1196-1208.  | 3.0 | 1         |
| 53 | 141 Targeted sub-total irradiation of mouse models for normal tissue complication modeling using a prototype micrort device. Radiotherapy and Oncology, 2006, 78, S46.                                    | 0.6 | O         |
| 54 | 2647. International Journal of Radiation Oncology Biology Physics, 2006, 66, S570.  | 0.8 | 0         |

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|----|---|-----|-----------|
| 55 | Potential Effect of Inherent Treatment Planning Uncertainties on Expected Vs. Actual Dose to Skin and Chest Wall with the Mammosite (MS) for Accelerated Partial Breast Irradiation. International Journal of Radiation Oncology Biology Physics, 2008, 72, S187. | 0.8 | O         |
| 56 | Errors and Uncertainties in Accelerated Partial Breast Irradiation (APBI) with Balloon Brachytherapy: Are Current Target Coverage Goals Adequate?. International Journal of Radiation Oncology Biology Physics, 2008, 72, S518.                                   | 0.8 | 0         |
| 57 | Dosimetric Characterization of Stereotactic Small Animal Irradiator. International Journal of Radiation Oncology Biology Physics, 2009, 75, S671.   | 0.8 | 0         |
| 58 | SMALL ANIMAL SBRT IRRADIATOR. Radiotherapy and Oncology, 2009, 92, S117.  | 0.6 | 0         |
| 59 | Gamma Analysis of Normalized and Un-normalized Dose Distributions. International Journal of Radiation Oncology Biology Physics, 2012, 84, S806.   | 0.8 | 0         |
| 60 | Depletion of Regulatory T Cells Does Not Influence the Inflammatory Response Induced by High-dose Irradiation. International Journal of Radiation Oncology Biology Physics, 2012, 84, S689-S690.  | 0.8 | 0         |
| 61 | Commissioning and Acceptance Testing of a High Dose-Rate 32P Plaque for Intraoperative Brachytherapy of the Spinal Dura. Brachytherapy, 2015, 14, S64.  | 0.5 | 0         |
| 62 | An Automated Treatment Plan Quality Assurance Program for Tandem and Ovoid High Dose-Rate Brachytherapy. Brachytherapy, 2015, 14, S67.  | 0.5 | 0         |
| 63 | Stereotactic Treatment of Multiple Brain Metastasis: Pseudo In Vivo Evaluation of Three Different Techniques. International Journal of Radiation Oncology Biology Physics, 2015, 93, E572.  | 0.8 | O         |
| 64 | Reduced Toxicity with Equivalent Outcomes Using Three-Dimensional (3D) Image-Based versus<br>Two-Dimensional (2D) Brachytherapy in an Indigent Cervical Cancer Population. Brachytherapy, 2016,<br>15, S102-S103.   | 0.5 | 0         |
| 65 | EP-1718: Estimation of tumor radio-sensitivity using mathematical models and analysis of the oxygenation role. Radiotherapy and Oncology, 2016, 119, S803-S804.   | 0.6 | 0         |
| 66 | Modeling Radiosurgery Normal Tissue Dose: Target Surface Area Serves as the Best Single Pre-treatment Predictor. International Journal of Radiation Oncology Biology Physics, 2019, 105, S103-S104.   | 0.8 | 0         |
| 67 | Custom Design for Extended FSD Superficial Treatments. International Journal of Radiation Oncology Biology Physics, 2019, 105, E790-E791.   | 0.8 | O         |
| 68 | SU-FF-T-262: Advanced Irradiator for the Small Animal Conformal Treatment. Medical Physics, 2005, 32, 2010-2010.  | 3.0 | 0         |
| 69 | SUâ€FFâ€Tâ€183: Dosimetric Verification of a Commercial Research Irradiator. Medical Physics, 2007, 34, 2443-2443.  | 3.0 | O         |
| 70 | SU-EE-A1-01: Dosimetric Comparisons of DMPO and Two-Step Approach Step-And-Shoot IMRT Plans. Medical Physics, 2007, 34, 2335-2335.  | 3.0 | 0         |
| 71 | TU-C-AUD C-03: Teletherapy MicroRT Using a Commercial 192Ir Source. Medical Physics, 2008, 35, 2890-2890.   | 3.0 | 0         |
| 72 | THâ€Câ€351â€01: Design of the Washington University Small Animal Conformal Micro Irradiator. Medical Physics, 2008, 35, 2974-2974.  | 3.0 | О         |

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|------------|---|-------|-----------|
| <b>7</b> 3 | THâ€Câ€AUD Aâ€01: A Systematic Analysis of Errors and Uncertainties in Partial Breast Irradiation Using the MammoSite Balloon Catheter. Medical Physics, 2008, 35, 2969-2969. | 3.0   | O         |
| 74         | TH-C-BRC-04: Small Animal Stereotactic Irradiator. Medical Physics, 2009, 36, 2798-2798.  | 3.0   | O         |
| <b>7</b> 5 | SU-FF-J-157: A Monte Carlo Model for Small Animal Stereotactic Irradiation. Medical Physics, 2009, 36, 2513-2513.   | 3.0   | O         |
| 76         | SU-FF-T-483: Optical Enhancement of DNA-Base Radio-Resistivity. Medical Physics, 2009, 36, 2634-2634.   | 3.0   | 0         |
| 77         | TU-C-BRD-04: Development and Application of a Pre-Clinical Stereotactic Irradiator. Medical Physics, 2009, 36, 2720-2720.   | 3.0   | 0         |
| 78         | SU-GG-J-06: Optical and X-Ray Image Guided Stereotactic Body Irradiator Dedicated to Small Animals. Medical Physics, 2010, 37, 3146-3146.                                     | 3.0   | 0         |
| 79         | TH-C-204B-08: Energy Dependency and Dosimetric Modeling in Small Animal Stereotactic Irradiaton.<br>Medical Physics, 2010, 37, 3456-3457.                                     | 3.0   | O         |
| 80         | SU-E-T-386: Gamma Analysis of Normalized and Un-Normalized Dose Distributions. Medical Physics, 2012, 39, 3793-3793.  | 3.0   | 0         |
| 81         | SU-E-T-274: Monte Carlo Simulations of Output Factors for a Small Animal Irradiator. Medical Physics, 2012, 39, 3766-3766.  | 3.0   | O         |
| 82         | SU-E-T-381: The Step-And-Shoot IMRT Overshooting Phenomena: A Novel Method to Mitigate Patient Overdosage. Medical Physics, 2013, 40, 292-292.                                | 3.0   | 0         |
| 83         | SU-E-T-556: Verification and Evaluation of Acuros XB Dose Calculations for Stereotactic Ablative Radiotherapy of the Thoracic Spine. Medical Physics, 2013, 40, 333-333.      | 3.0   | O         |
| 84         | WE-E-108-05: Evaluation of the XRAD 225Cx MC Source Model in Heterogeneous Mediums. Medical Physics, 2013, 40, 489-489.   | 3.0   | 0         |
| 85         | WE-E-108-06: Demonstration of a CBCT Based Monte Carlo Model for Small Animal Treatment Planning. Medical Physics, 2013, 40, 489-489.   | 3.0   | O         |
| 86         | SU-E-T-213: Initial Experience with VMAT Plan and Delivery Verification Using a DICOM-RT Framework and Linac Delivery Log Files. Medical Physics, 2014, 41, 272-272.          | 3.0   | 0         |
| 87         | WE-A-17A-04: Development of An Ultra-Fast Monte Carlo Dose Engine for High Dose Rate Brachytherapy.<br>Medical Physics, 2014, 41, 488-488.                                    | 3.0   | O         |
| 88         | TU-AB-201-02: An Automated Treatment Plan Quality Assurance Program for Tandem and Ovoid High Dose-Rate Brachytherapy. Medical Physics, 2015, 42, 3594-3594.                  | 3.0   | 0         |
| 89         | SU-D-BRD-02: Auto Weekly - An Automated Online Weekly Chart Check System for Medical Physics.<br>Medical Physics, 2015, 42, 3209-3209.  | 3.0   | 0         |
| 90         | SUâ€Eâ€Tâ€184: Clinical VMAT QA Practice Using LINAC Delivery Log Files. Medical Physics, 2015, 42, 3374-337  | 4.3.0 | 0         |

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|----|---|-----|-----------|
| 91 | SU-C-BRA-06: Automatic Brain Tumor Segmentation for Stereotactic Radiosurgery Applications. Medical Physics, 2016, 43, 3322-3322.                     | 3.0 | O         |
| 92 | Benefit of Multimodality Image Acquisition in the Treatment Planning of Stereotactic Radiosurgery (SRS) of Arteriovenous Malformation (AVM)., 2020,,. |     | 0         |