Nicolas Boussion

List of Publications by Year
in descending order

34 papers	822 citations	686830 13 h-index	500791 28 g-index
36 all docs	36 docs citations	36 times ranked	1167 citing authors

#	Article	IF	Citations
1	Optimizing the Beam Selection for Noncoplanar VMAT by Using Simulated Annealing Approach. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 609-618.	2.7	3
2	Minimal channel GreenLight photovaporization before permanent implant prostate brachytherapy for patients with obstructive symptoms: Technically feasible and safe. Brachytherapy, 2021, 20, 50-57.	0.2	1
3	A machine-learning approach based on 409 treatments to predict optimal number of iodine-125 seeds in low-dose-rate prostate brachytherapy. Journal of Contemporary Brachytherapy, 2021, 13, 541-548.	0.4	2
4	Kilovoltage intrafraction monitoring during normofractionated prostate cancer radiotherapy. Cancer Radiotherapie: Journal De La Societe Francaise De Radiotherapie Oncologique, 2020, 24, 99-105.	0.6	5
5	Toxicity in patients treated with permanent prostate brachytherapy using intraoperatively built custom-linked seeds versus loose seeds. Journal of Contemporary Brachytherapy, 2020, 12, 547-553.	0.4	2
6	Dose to the penile bulb and individual patient anatomy are predictive of erectile dysfunction in men treated with ^{125}I low dose rate brachytherapy for localized prostate cancer. Acta Oncológica, 2019, 58, 1029-1035.	0.8	7
7	Image Enhancement With PDEs and Nonconservative Advection Flow Fields. IEEE Transactions on Image Processing, 2019, 28, 3075-3088.	6.0	15
8	Prostate Volume Segmentation in TRUS Using Hybrid Edge-Bhattacharyya Active Surfaces. IEEE Transactions on Biomedical Engineering, 2019, 66, 920-933.	2.5	11
9	Multi-Scale Modeling and Oxygen Impact on Tumor Temporal Evolution: Application on Rectal Cancer During Radiotherapy. IEEE Transactions on Medical Imaging, 2018, 37, 871-880.	5.4	5
10	PO-0897: Predicting the number of seeds in LDR prostate brachytherapy using machine learning and 320 patients. Radiotherapy and Oncology, 2018, 127, S477-S478.	0.3	2
11	Evaluation of the "Quadrella" at 3 years: New index to assess functional and oncological performance specific to prostate brachytherapy. Brachytherapy, 2018, 17, 782-787.	0.2	2
12	Fully automatic deformable registration of pretreatment MRI/CT for image-guided prostate radiotherapy planning. Medical Physics, 2017, 44, 6447-6455.	1.6	13
13	GATE Monte-Carlo Simulation of an MV-CBCT Flat Panel for Synergistic Imaging and Dosimetric Applications in Radiotherapy. IEEE Transactions on Radiation and Plasma Medical Sciences, 2017, 1, 444-451.	2.7	3
14	Patient positioning in radiotherapy based on surface imaging using time of flight cameras. Medical Physics, 2016, 43, 4833-4841.	1.6	18
15	DEMAT: A multi-institutional dosimetry audit of rotational and static intensity-modulated radiotherapy. Physica Medica, 2016, 32, 664-670.	0.4	12
16	GGEMS-Brachy: GPU GEant4-based Monte Carlo simulation for brachytherapy applications. Physics in Medicine and Biology, 2015, 60, 4987-5006.	1.6	18
17	Monte-Carlo dosimetry for intraoperative radiotherapy using a low energy x-ray source. Acta Oncológica, 2015, 54, 1788-1795.	0.8	23
18	Abstract P2-13-29: External dosimetry and in vivo measurements improve surgical comprehension of intraoperative radiotherapy using Intrabeam™. , 2015, , .		0

#	Article	IF	Citations
19	A review of the use and potential of the GATE Monte Carlo simulation code for radiation therapy and dosimetry applications. Medical Physics, 2014, 41, 064301.	1.6	332
20	Monte Carlo simulations on GPU for brachytherapy applications. , 2013, , .		1
21	Evaluation of a 3D local multiresolution algorithm for the correction of partial volume effects in positron emission tomography. Medical Physics, 2011, 38, 4920-4933.	1.6	39
22	OncoPET_DB: A Freely Distributed Database of Realistic Simulated Whole Body 18F-FDG PET Images for Oncology. IEEE Transactions on Nuclear Science, 2010, 57, 246-255.	1.2	25
23	Functional and structural synergy for resolution recovery and partial volume correction in brain PET. NeuroImage, 2009, 44, 340-348.	2.1	81
24	Contrast enhancement in emission tomography by way of synergistic PET/CT image combination. Computer Methods and Programs in Biomedicine, 2008, 90, 191-201.	2.6	25
25	PET Image Denoising Using a Synergistic Multiresolution Analysis of Structural (MRI/CT) and Functional Datasets. Journal of Nuclear Medicine, 2008, 49, 657-666.	2.8	46
26	Conditional partial volume correction for emission tomography: A wavelet-based hidden Markov model and multi-resolution approach. , 2008, , .		2
27	Adrenal Tuberculosis Revealed by FDG PET. Clinical Nuclear Medicine, 2008, 33, 821-823.	0.7	17
28	Optimization of Spatial Resolution for Peripheral Magnetic Resonance Angiography. Academic Radiology, 2007, 14, 54-61.	1.3	5
29	Geometrical accuracy and fusion of multimodal vascular images: A phantom study. Medical Physics, 2004, 31, 1434-1443.	1.6	23
30	CT and MR Imaging of Nitinol Stents with Radiopaque Distal Markers. Journal of Vascular and Interventional Radiology, 2004, 15, 615-624.	0.2	41
31	Extraction of epileptogenic foci from PET and SPECT images by fuzzy modeling and data fusion. NeuroImage, 2003, 19, 645-654.	2.1	7
32	Registration and fusion of multimodal vascular images: a phantom study. , 2003, , .		0
33	Automated detection of local normalization areas for ictal-interictal subtraction brain SPECT. Journal of Nuclear Medicine, 2002, 43, 1419-25.	2.8	8
34	Towards an optimal reference region in single-photon emission tomography difference images in epilepsy. European Journal of Nuclear Medicine and Molecular Imaging, 2000, 27, 155-160.	3.3	8