Maximilien Vermandel

List of Publications by Year
in descending order

63	1,131	361296 20	434063 31
papers	citations	h-index	g-index

75	75	75	1672
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using X-rays in photodynamic therapy: an overview. Photochemical and Photobiological Sciences, 2018, 17, 1612-1650.	1.6	92
2	Phase II Study of a Radiotherapy Total Dose Increase in Hypoxic Lesions Identified by ¹⁸F-Misonidazole PET/CT in Patients with Nonâ€“Small Cell Lung Carcinoma (RTEP5 Study). Journal of Nuclear Medicine, 2017, 58, 1045-1053.	2.8	70
3	INtraoperative photoDYnamic Therapy for GliOblastomas (INDYGO): Study Protocol for a Phase I Clinical Trial. Neurosurgery, 2019, 84, E414-E419.	0.6	64
4	Segmentation of abdominal ultrasound images of the prostate using a priori information and an adapted noise filter. Computerized Medical Imaging and Graphics, 2005, 29, 43-51.	3.5	61
5	Experimental use of photodynamic therapy in high grade gliomas: A review focused on 5-aminolevulinic acid. Photodiagnosis and Photodynamic Therapy, 2014, 11, 319-330.	1.3	61
6	Standardized intraoperative 5-ALA photodynamic therapy for newly diagnosed glioblastoma patients: a preliminary analysis of the INDYGO clinical trial. Journal of Neuro-Oncology, 2021, 152, 501-514.	1.4	47
7	A New Method for Volume Segmentation of PET Images, Based on Possibility Theory. IEEE Transactions on Medical Imaging, 2011, 30, 409-423.	5.4	41
8	Stacking denoising auto-encoders in a deep network to segment the brainstem on MRI in brain cancer patients: A clinical study. Computerized Medical Imaging and Graphics, 2016, 52, 8-18.	3.5	40
9	Segmentation algorithms of subcortical brain structures on MRI for radiotherapy and radiosurgery: A survey. Irbm, 2015, 36, 200-212.	3.7	36
10	Impact of consensus contours from multiple PET segmentation methods on the accuracy of functional volume delineation. European Journal of Nuclear Medicine and Molecular Imaging, 2016, 43, 911-924.	3.3	35
11	Interstitial 5-ALA photodynamic therapy and glioblastoma: Preclinical model development and preliminary results. Photodiagnosis and Photodynamic Therapy, 2016, 13, 218-224.	1.3	32
12	Fluorescence guided resection and glioblastoma in 2015: A review. Lasers in Surgery and Medicine, 2015, 47, 441-451.	1.1	31
13	Grade 2 meningioma and radiosurgery. Journal of Neurosurgery, 2015, 122, 1157-1162.	0.9	30
14	On Image Segmentation Methods Applied to Glioblastoma: State of Art and New Trends. Irbm, 2016, 37, 131-143.	3.7	28
15	Evaluation of PET volume segmentation methods. Nuclear Medicine Communications, 2012, 33, 34-42.	0.5	26
16	Nuclear medicine for photodynamic therapy in cancer: Planning, monitoring and nuclear PDT. Photodiagnosis and Photodynamic Therapy, 2017, 18, 236-243.	1.3	25
17	Interactive contour delineation of organs at risk in radiotherapy: Clinical evaluation on NSCLC patients. Medical Physics, 2016, 43, 2569-2580.	1.6	22
18	3D rotational angiography: use of propeller rotation for the evaluation of intracranial aneurysms. American Journal of Neuroradiology, 2005, 26, 163-5.	1.2	22

#	Article	IF	Citations
19	From MIP image to MRA segmentation using fuzzy set theory. Computerized Medical Imaging and Graphics, 2007, 31, 128-140.	3.5	21
20	Recent advances in cerebrovascular simulation and neuronavigation for the optimization of intracranial aneurysm clipping. Computer Aided Surgery, 2012, 17, 47-55.	1.8	21
21	A novel device for intraoperative photodynamic therapy dedicated to glioblastoma treatment. Future Oncology, 2017, 13, 2441-2454.	1.1	20
22	Biologically effective dose and prediction of obliteration of unruptured arteriovenous malformations treated by upfront Gamma Knife radiosurgery: a series of 149 consecutive cases. Journal of Neurosurgery, 2021, 134, 1901-1911.	0.9	20
23	Supervised machine learning-based classification scheme to segment the brainstem on MRI in multicenter brain tumor treatment context. International Journal of Computer Assisted Radiology and Surgery, 2016, 11, 43-51.	1.7	19
24	Is STAPLE algorithm confident to assess segmentation methods in PET imaging?. Physics in Medicine and Biology, 2015, 60, 9473-9491.	1.6	15
25	Ultrasound image guided patient setup for prostate cancer conformal radiotherapy. Pattern Recognition Letters, 2007, 28, 1808-1817.	2.6	14
26	Comparison of three light doses in the photodynamic treatment of actinic keratosis using mathematical modeling. Journal of Biomedical Optics, 2015, 20, 058001.	1.4	14
27	Interstitial photodynamic therapy and glioblastoma: Light fractionation in a preclinical model. Lasers in Surgery and Medicine, 2017, 49, 506-515.	1.1	14
28	Comparison of different treatment schemes in 5-ALA interstitial photodynamic therapy for high-grade glioma in a preclinical model: An MRI study. Photodiagnosis and Photodynamic Therapy, 2019, 25, 166-176.	1.3	14
29	Registration, Matching, and Data Fusion in 2D/3D Medical Imaging: Application to DSA and MRA. Lecture Notes in Computer Science, 2003, , 778-785.	1.0	12
30	3D automatic segmentation and reconstruction of prostate on MR images. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5259-62.	0.5	11
31	Preoperative Simulation for the Planning of Microsurgical Clipping of Intracranial Aneurysms. Simulation in Healthcare, 2014, 9, 370-376.	0.7	11
32	MRI assessment of treatment delivery for interstitial photodynamic therapy of highâ€grade glioma in a preclinical model. Lasers in Surgery and Medicine, 2018, 50, 460-468.	1.1	10
33	Photodynamic therapy for glioblastoma: A preliminary approach for practical application of light propagation models. Lasers in Surgery and Medicine, 2018, 50, 523-534.	1.1	10
34	Protective STA-MCA bypass to prevent brain ischemia during high-flow bypass surgery: case series of 10 patients. Acta Neurochirurgica, 2019, 161, 1207-1214.	0.9	10
35	Dijkstra's algorithm applied to 3D skeletonization of the brain vascular tree: Evaluation and application to symbolic. , 2010, 2010, 3081-4.		9
36	Les mÃ©thodes de seuillage en TEPÂ: un Ã©tat de lâ€™art. Medecine Nucleaire, 2010, 34, 119-131.	0.2	9

#	Article	IF	Citations
37	Superficial temporal artery-middle cerebral artery anastomosis patency correlates with cerebrovascular reserve in adult moyamoya syndrome patients. Neurochirurgie, 2019, 65, 146-151.	0.6	8
38	A new method based on both fuzzy set and possibility theories for tumor volume segmentation on PET images. , 2008, 2008, 3122-5.		7
39	5-ALA Photodynamic Therapy in Neurosurgery, Towards the Design of a Treatment Planning System: A Proof of Concept. Irbm, 2017, 38, 34-41.	3.7	7
40	Parallelized Monte-Carlo dosimetry using graphics processing units to model cylindrical diffusers used in photodynamic therapy: From implementation to validation. Photodiagnosis and Photodynamic Therapy, 2019, 26, 351-360.	1.3	7
41	Management of Patients with Renal Failure Undergoing Dialysis During ¹³¹I Therapy for Thyroid Cancer. Journal of Nuclear Medicine, 2020, 61, 1161-1170.	2.8	7
42	Three-dimensional skeletonization and symbolic description in vascular imaging: preliminary results. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 233-246.	1.7	6
43	DÃ©termination par logique floue des volumes tumoraux en TEPÂ: application au suivi de la radio-immunothÃ©rapie des lymphomes. Medecine Nucleaire, 2007, 31, 656-664.	0.2	5
44	An easyâ€toâ€use phantom and protocol for weekly PET quality assessment: A multicenter study. Medical Physics, 2008, 35, 3922-3934.	1.6	5
45	MedataWeb: A shared platform for multimodality medical images and Atlases. Irbm, 2012, 33, 223-226.	3.7	5
46	Stereotactic Radiosurgery: From a Prescribed Physical Radiation Dose Toward Biologically Effective Dose. Mayo Clinic Proceedings, 2021, 96, 1114-1116.	1.4	5
47	Intrinsic 2D/3D registration based on a hybrid approach: use in the radiosurgical imaging process. Cellular and Molecular Biology, 2007, 52, 44-53.	0.3	5
48	Correction of images in an open-configuration MR imaging system for radiation therapy planning and Interventional MRI. International Journal of Computer Assisted Radiology and Surgery, 2008, 3, 283-289.	1.7	4
49	Multimodal imaging in radiotherapy: Focus on adaptive therapy and quality control. Cancer Radiotherapie: Journal De La Societe Francaise De Radiotherapie Oncologique, 2020, 24, 411-417.	0.6	4
50	Combining MIP images and fuzzy set principles for vessels segmentation: application to TOF MRA and CE-MRA. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6256-9.	0.5	3
51	Volume quantification by fuzzy logic modelling in freehand ultrasound imaging. Ultrasonics, 2009, 49, 646-652.	2.1	3
52	ContrÃ1e de qualitÃ© en IRM : motivations, mÃ©thodes et pratiques. IRBM News, 2002, 23, 276-284.	0.1	2
53	Dâ€™une Â«Ânouvelle sorte de rayonnementÂÂ» Ã la tomodensitomÃ©trieÂ: une histoire du scanner. Irbm, 2009, 30, 33-39.	3.7	2
54	Nouvelle mÃ©thode de segmentation des volumes dâ€™intÃ©rÃªt en TEPÂ: utilisation de la thÃ©orie des possibilitÃ©s. Irbm, 2011, 32, 351-362.	3.7	2

#	Article	IF	Citations
55	Ã‰valuation de mÃ©thodes automatiques de segmentation des volumes tumoraux en tomographie par Ã©mission de positons par comparaison avec des contours manuels rÃ©alisÃ©s par un groupe dâ€™experts. Medecine Nucleaire, 2011, 35, 146-155.	0.2	2
56	A new phantom to assess and correct geometrical distortions for Magnetic Resonance Imaging: Design and preliminary experiments. Irbm, 2015, 36, 52-60.	3.7	2
57	A Warp-Knitted Light-Emitting Fabric-Based Device for In Vitro Photodynamic Therapy: Description, Characterization, and Application on Human Cancer Cell Lines. Cancers, 2021, 13, 4109.	1.7	2
58	Nouveaux tests Z-Score etÂStudent fondÃ©s surÂunÂdÃ©calage temporeldesÂdonnÃ©es d'IRM fonctionnelle d'activation cÃ©rÃ©brale: rÃ©sultats prÃ©liminaires. IRBM News, 2006, 27, 243-249.	0.1	0
59	Fusion dâ€™images en mÃ©decine nuclÃ©aireÂ: des concepts Ã lâ€™application clinique. Medecine Nucleaire, 2010, 34, 431-438.	0.2	0
60	IntÃ©rÃªt de la TEP au 18F-FDG prÃ©thÃ©rapeutique pour prÃ©dire la rÃ©ponse Ã la radio-immunothÃ©rapie dans les lymphomes non hodgkiniens. Medecine Nucleaire, 2010, 34, 647-654.	0.2	0
61	Interstitial photodynamic therapy and glioblastoma: light fractionation study on a preclinical model: preliminary results. , 2015, , .		0
62	The role of medical imaging in the context of photodynamic therapy. , 2019, , .		0
63	Quality Control of Nuclear Medicine Instrumentation and Protocol Standardisation. , 2017, , .		0