

# Benoît Macq

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

2,510  
citations

279798

23  
h-index

197818

49  
g-index

71  
all docs

71  
docs citations

71  
times ranked

2936  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometrically invariant watermarking using feature points. IEEE Transactions on Image Processing, 2002, 11, 1014-1028.	9.8	391
2	Serial registration of intraoperative MR images of the brain. Medical Image Analysis, 2002, 6, 337-359.	11.6	184
3	Feature extraction and selection for objective gait analysis and fall risk assessment by accelerometry. BioMedical Engineering OnLine, 2011, 10, 1.	2.7	176
4	Comparison of 12 deformable registration strategies in adaptive radiation therapy for the treatment of head and neck tumors. Radiotherapy and Oncology, 2008, 89, 1-12.	0.6	174
5	Artificial intelligence and machine learning for medical imaging: A technology review. Physica Medica, 2021, 83, 242-256.	0.7	135
6	Resting-state EEG study of comatose patients: a connectivity and frequency analysis to find differences between vegetative and minimally conscious states. Functional Neurology, 2012, 27, 41-7.	1.3	118
7	A particle filter for joint detection and tracking of color objects. Image and Vision Computing, 2007, 25, 1271-1281.	4.5	113
8	Pulsed 1.5- $\mu\text{m}$ LIDAR for Axial Aircraft Wake Vortex Detection Based on High-Brightness Large-Core Fiber Amplifier. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 441-450.	2.9	78
9	Evaluation of nonrigid registration models for interfraction dose accumulation in radiotherapy. Medical Physics, 2009, 36, 4268-4276.	3.0	73
10	Development and validation of an accelerometer-based method for quantifying gait events. Medical Engineering and Physics, 2015, 37, 226-232.	1.7	71
11	Diffeomorphic Registration of Images with Variable Contrast Enhancement. International Journal of Biomedical Imaging, 2011, 2011, 1-16.	3.9	70
12	Registration and Real-Time Visualization of Transcranial Magnetic Stimulation With 3-D MR Images. IEEE Transactions on Biomedical Engineering, 2004, 51, 1994-2005.	4.2	66
13	Design of Signal-Adapted Multidimensional Lifting Scheme for Lossy Coding. IEEE Transactions on Image Processing, 2004, 13, 1589-1603.	9.8	64
14	Tumour delineation and cumulative dose computation in radiotherapy based on deformable registration of respiratory correlated CT images of lung cancer patients. Radiotherapy and Oncology, 2007, 85, 232-238.	0.6	64
15	Single-Trial EEG Source Reconstruction for Brain-Computer Interface. IEEE Transactions on Biomedical Engineering, 2008, 55, 1592-1601.	4.2	58
16	Effect of dietary fatty acid composition on growth, fatty acids composition and hepatic lipid metabolism in juvenile turbot ( <i>Scophthalmus maximus</i> L.) fed diets with required n3 LC-PUFAs. Aquaculture, 2017, 479, 591-600.	3.5	48
17	Tumor detection in the bladder wall with a measurement of abnormal thickness in CT scans. IEEE Transactions on Biomedical Engineering, 2003, 50, 383-390.	4.2	46
18	Optimal Transport for Secure Spread-Spectrum Watermarking of Still Images. IEEE Transactions on Image Processing, 2014, 23, 1694-1705.	9.8	42

#	ARTICLE	IF	CITATIONS
19	Towards microstructure fingerprinting: Estimation of tissue properties from a dictionary of Monte Carlo diffusion MRI simulations. <i>NeuroImage</i> , 2019, 184, 964-980.	4.2	38
20	Towards an integrated system for planning and assisting maxillofacial orthognathic surgery. <i>Computer Methods and Programs in Biomedicine</i> , 2008, 91, 13-21.	4.7	35
21	A queue-based region growing algorithm for accurate segmentation of multi-dimensional digital images. <i>Signal Processing</i> , 1997, 60, 1-10.	3.7	30
22	Efficient multi-modal dense field non-rigid registration: alignment of histological and section images. <i>Medical Image Analysis</i> , 2005, 9, 538-546.	11.6	29
23	Domain adversarial networks and intensity-based data augmentation for male pelvic organ segmentation in cone beam CT. <i>Computers in Biology and Medicine</i> , 2021, 131, 104269.	7.0	27
24	Prefetching and Caching Strategies for Remote and Interactive Browsing of JPEG2000 Images. <i>IEEE Transactions on Image Processing</i> , 2007, 16, 1339-1354.	9.8	24
25	Versatile Clinical Information System Design for Emergency Departments. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2005, 9, 174-183.	3.2	22
26	Secure Architectures Implementing Trusted Coalitions for Blockchain Distributed Learning (TCLearn). <i>IEEE Access</i> , 2019, 7, 181789-181799.	4.2	22
27	Assessing the validity of the approximation of diffusion-weighted MRI signals from crossing fascicles by sums of signals from single fascicles. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 2332-2345.	3.0	18
28	Estimation of the deformations induced by articulated bodies: Registration of the spinal column. <i>Biomedical Signal Processing and Control</i> , 2007, 2, 16-24.	5.7	16
29	Evaluation of the radiobiological impact of anatomic modifications during radiation therapy for head and neck cancer: Can we simply summate the dose?. <i>Radiotherapy and Oncology</i> , 2010, 96, 131-138.	0.6	15
30	Improved fidelity of brain microstructure mapping from single-shell diffusion MRI. <i>Medical Image Analysis</i> , 2015, 26, 268-286.	11.6	15
31	Lipid deposition patterns among different sizes of three commercial fish species. <i>Aquaculture Research</i> , 2018, 49, 1046-1052.	1.8	15
32	Analysis and experimental evaluation of image-based PUFs. <i>Journal of Cryptographic Engineering</i> , 2012, 2, 189-206.	1.8	14
33	Cross-Domain Data Augmentation for Deep-Learning-Based Male Pelvic Organ Segmentation in Cone Beam CT. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1154.	2.5	13
34	On-board axial detection of wake vortices using a 2-m LiDAR. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2008, 44, 1276-1290.	4.7	12
35	Suppressor of cytokine signaling 3 (SOCS3) is related to pro-inflammatory cytokine production and triglyceride deposition in turbot ( <i>Scophthalmus maximus</i> ). <i>Fish and Shellfish Immunology</i> , 2017, 70, 381-390.	3.6	12
36	Registration of pencil beam proton radiography data with X-ray CT. <i>Medical Physics</i> , 2017, 44, 5393-5401.	3.0	12

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37	Reassessment of stopping power ratio uncertainties caused by mean excitation energies using a water-based formalism. <i>Medical Physics</i> , 2018, 45, 3361-3370.	3.0	11
38	Sparse deconvolution of proton radiography data to estimate water equivalent thickness maps. <i>Medical Physics</i> , 2020, 47, 509-517.	3.0	10
39	Reinforcement Learning for Radiotherapy Dose Fractioning Automation. <i>Biomedicines</i> , 2021, 9, 214.	3.2	10
40	Optimum quality and progressive resolution of video signals. <i>Annales Des Telecommunications/Annals of Telecommunications</i> , 1990, 45, 487-502.	2.5	9
41	Scalable Feature Extraction for Coarse-to-Fine JPEG 2000 Image Classification. <i>IEEE Transactions on Image Processing</i> , 2011, 20, 2636-2649.	9.8	9
42	Simulation of the human TMJ behavior based on interdependent joints topology. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 105, 217-232.	4.7	9
43	openPR "A computational tool for CT conversion assessment with proton radiography. <i>Medical Physics</i> , 2021, 48, 387-396.	3.0	9
44	Conceptualising mixed spaces of interaction for designing continuous interaction. <i>Virtual Reality</i> , 2004, 8, 83-95.	6.1	8
45	3D posture estimation using geodesic distance maps. <i>Multimedia Tools and Applications</i> , 2008, 38, 365-384.	3.9	8
46	Remote Interactive Browsing of Video Surveillance Content Based on JPEG 2000. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2009, 19, 1143-1157.	8.3	8
47	Usability evaluation of virtual reality interaction techniques for positioning and manoeuvring in reduced, manipulation-oriented environments. <i>Visual Computer</i> , 2010, 26, 619-628.	3.5	8
48	Validated extraction of gait events from 3D accelerometer recordings. , 2012, , .		8
49	Universal variable length coding for an integrated approach to image coding. <i>Annales Des Telecommunications/Annals of Telecommunications</i> , 1991, 46, 452-459.	2.5	7
50	Performances of linear tools and models for error detection and concealment in subband image transmission. <i>IEEE Transactions on Image Processing</i> , 2002, 11, 518-529.	9.8	7
51	Regression applied to protein binding site prediction and comparison with classification. <i>BMC Bioinformatics</i> , 2009, 10, 276.	2.6	7
52	Randomly driven fuzzy key extraction of unclonable images. , 2010, , .		6
53	A time frequency domain feature extraction algorithm for landmine identification from GPR data. <i>Near Surface Geophysics</i> , 2008, 6, 411-421.	1.2	5
54	Impacts of Watermarking Security on Tardos-Based Fingerprinting. <i>IEEE Transactions on Information Forensics and Security</i> , 2013, 8, 1038-1050.	6.9	5

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55	Multi-modal movement reconstruction for stroke rehabilitation and performance assessment. Journal on Multimodal User Interfaces, 2011, 4, 119-127.	2.9	4
56	Anatomical atlas in the context of head and neck radiotherapy and its use to automatic segmentation. Biomedical Signal Processing and Control, 2012, 7, 447-455.	5.7	4
57	Exploitation of Interframe Redundancy for Real-Time Volumetric Reconstruction of Arbitrary Shapes. IEEE Journal on Selected Topics in Signal Processing, 2008, 2, 556-567.	10.8	3
58	A P300 potential evaluation wavelet method comparing individuals with high and low risk for alcoholism. Neural Computing and Applications, 2017, 28, 3737-3748.	5.6	3
59	Continuous real time 3D motion reproduction using dynamic MRI and precomputed 4DCT deformation fields. Journal of Applied Clinical Medical Physics, 2020, 21, 236-248.	1.9	3
60	Artificial intelligence and thyroid disease management. Biochemia Medica, 2022, 32, 182-188.	2.7	3
61	Improved 3D U-Net robustness against JPEG 2000 compression for male pelvic organ segmentation in radiotherapy. Journal of Medical Imaging, 2021, 8, 041207.	1.5	2
62	Lossless hierarchical storage of images. European Transactions on Telecommunications, 1995, 6, 267-274.	1.2	1
63	Technologies du tatouage pour l'authentification et la protection des images. Annales Des Telecommunications/Annals of Telecommunications, 2000, 55, 92-100.	2.5	1
64	Multi-domain framework for multimedia archiving using multimodal interaction. Integrated Computer-Aided Engineering, 2011, 18, 15-28.	4.6	1
65	Passive and Active Wireless Device Secure Identification. IEEE Access, 2020, 8, 83312-83320.	4.2	1
66	Selective prediction error transmission using motion information. Signal Processing: Image Communication, 1998, 12, 71-81.	3.2	0
67	Techniques for secure execution of mobile code: a review. Annales Des Telecommunications/Annals of Telecommunications, 2000, 55, 379.	2.5	0
68	Online fat detection and evaluation in modelling digital physiological fish. Aquaculture Research, 2020, 51, 3175-3190.	1.8	0
69	Implementation of a Holonic Multi-agent System in Mixed or Augmented Reality for Large Scale Interactions. Lecture Notes in Computer Science, 2020, , 447-450.	1.3	0
70	Optimal Intermittent Particle Filter. IEEE Transactions on Signal Processing, 2022, 70, 2814-2825.	5.3	0