Michel Dojat

List of Publications by Citations

121 papers	4,968 citations	25 h-index	70 g-index
150 ext. papers	6,017 ext. citations	3.7 avg, IF	4.74 L-index

#	Paper	IF	Citations
121	The Multimodal Brain Tumor Image Segmentation Benchmark (BRATS). *IEEE Transactions on Medical Imaging*, **2015**, 34, 1993-2024	11.7	2132
120	A multicenter randomized trial of computer-driven protocolized weaning from mechanical ventilation. *American Journal of Respiratory and Critical Care Medicine*, **2006**, 174, 894-900	10.2	842
119	fMRI retinotopic mapping--step by step. *NeuroImage*, **2002**, 17, 1665-83	7.9	149
118	Clinical evaluation of a computer-controlled pressure support mode. *American Journal of Respiratory and Critical Care Medicine*, **2000**, 161, 1161-6	10.2	125
117	Sequence of pattern onset responses in the human visual areas: an fMRI constrained VEP source analysis. *NeuroImage*, **2004**, 21, 801-17	7.9	112
116	Evaluation of a knowledge-based system providing ventilatory management and decision for extubation. *American Journal of Respiratory and Critical Care Medicine*, **1996**, 153, 997-1004	10.2	110
115	Moving illusory contours activate primary visual cortex: an fMRI study. *Cerebral Cortex*, **2000**, 10, 663-70	5.1	95
114	A knowledge-based system for assisted ventilation of patients in intensive care units. *Journal of Clinical Monitoring and Computing*, **1992**, 9, 239-50		89
113	Objective Evaluation of Multiple Sclerosis Lesion Segmentation using a Data Management and Processing Infrastructure. *Scientific Reports*, **2018**, 8, 13650	4.9	87
112	The neural bases of grapheme-color synesthesia are not localized in real color-sensitive areas. *Cerebral Cortex*, **2012**, 22, 1622-33	5.1	67
111	NɔGanesh: a working system for the automated control of assisted ventilation in ICUs. *Artificial Intelligence in Medicine*, **1997**, 11, 97-117	7.4	65
110	A UMLS-based knowledge acquisition tool for rule-based clinical decision support system development. *Journal of the American Medical Informatics Association: JAMIA*, **2001**, 8, 351-60	8.6	57
109	Computer-driven management of prolonged mechanical ventilation and weaning: a pilot study. *Intensive Care Medicine*, **2005**, 31, 1446-50	14.5	51
108	Distributed local MRF models for tissue and structure brain segmentation. *IEEE Transactions on Medical Imaging*, **2009**, 28, 1278-95	11.7	50
107	Multimodal MRI segmentation of ischemic stroke lesions. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 1595-8		46
106	Towards an ontology for sharing medical images and regions of interest in neuroimaging. *Journal of Biomedical Informatics*, **2008**, 41, 766-78	10.2	45
105	Fast joint detection-estimation of evoked brain activity in event-related FMRI using a variational approach. *IEEE Transactions on Medical Imaging*, **2013**, 32, 821-37	11.7	43

104	Desperately seeking grey matter volume changes in sleep apnea: A methodological review of magnetic resonance brain voxel-based morphometry studies. *Sleep Medicine Reviews*, **2016**, 25, 112-20	10.2	39
103	A critical review of the neuroimaging literature on synesthesia. *Frontiers in Human Neuroscience*, **2015**, 9, 103	3.3	37
102	A cooperative framework for segmentation of MRI brain scans. *Artificial Intelligence in Medicine*, **2000**, 20, 77-93	7.4	35
101	Automated segmentation of human brain MR images using a multi-agent approach. *Artificial Intelligence in Medicine*, **2004**, 30, 153-75	7.4	34
100	Retinotopic and lateralized processing of spatial frequencies in human visual cortex during scene categorization. *Journal of Cognitive Neuroscience*, **2013**, 25, 1315-31	3.1	33
99	Timing of interactions across the visual field in the human cortex. *NeuroImage*, **2004**, 21, 818-28	7.9	33
98	Scenario recognition for temporal reasoning in medical domains. *Artificial Intelligence in Medicine*, **1998**, 14, 139-55	7.4	32
97	Knowledge construction from time series data using a collaborative exploration system. *Journal of Biomedical Informatics*, **2007**, 40, 672-87	10.2	32
96	Distributed Markovian segmentation: Application to MR brain scans. *Pattern Recognition*, **2007**, 40, 3467-3480	7.7	25
95	A BOLD signature of eyeblinks in the visual cortex. *NeuroImage*, **2012**, 61, 149-61	7.9	24
94	Realistic model for temporal reasoning in real-time patient monitoring. *Applied Artificial Intelligence*, **1996**, 10, 121-144	2.3	21
93	Knowledge-based systems for automatic ventilatory management. *Respiratory Care Clinics of North America*, **2001**, 7, 379-96, viii		20
92	Using a general theory of time and change in patient monitoring: experiment and evaluation. *Computers in Biology and Medicine*, **1997**, 27, 435-52	7	19
91	Adaptive weighted fusion of multiple MR sequences for brain lesion segmentation **2010**,		17
90	Multi-level temporal abstraction for medical scenario construction. *International Journal of Adaptive Control and Signal Processing*, **2005**, 19, 377-394	2.8	17
89	Temporal and Spatial Independent Component Analysis for fMRI Data Sets Embedded in theAnalyzeFMRIRPackage. *Journal of Statistical Software*, **2011**, 44,	7.3	16
88	DEGEL: A Hybrid, Multiple-Ontology Framework for Specification and Retrieval of Clinical Guidelines. *Lecture Notes in Computer Science*, **2003**, 122-131	0.9	16
87	Age-Related Differences in Spatial Frequency Processing during Scene Categorization. *PLoS ONE*, **2015**, 10, e0134554	3.7	15

86	Two new stable anatomical landmarks on the Central Sulcus: definition, automatic detection, and their relationship with primary motor functions of the hand. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 7795-8	0.9	14
85	Contributions of contour frequency, amplitude, and luminance to the watercolor effect estimated by conjoint measurement. *Journal of Vision*, **2014**, 14,	0.4	13
84	A multilayer ontology of instruments for neurological, behavioral and cognitive assessments. *Neuroinformatics*, **2015**, 13, 93-110	3.2	12
83	Effects of background and contour luminance on the hue and brightness of the Watercolor effect. *Vision Research*, **2018**, 144, 9-19	2.1	11
82	Use of maximum end-tidal CO(2) values to improve end-tidal CO(2) monitoring accuracy. *Respiratory Care*, **2011**, 56, 278-83	2.1	11
81	Agentification of Markov model-based segmentation: application to magnetic resonance brain scans. *Artificial Intelligence in Medicine*, **2009**, 46, 81-95	7.4	10
80	Constraint reasoning in deep biomedical models. *Artificial Intelligence in Medicine*, **2005**, 34, 77-88	7.4	10
79	Mechanical ventilation: changing concepts. *Indian Journal of Critical Care Medicine*, **2005**, 9, 235-243	1.3	10
78	Effects of aging on low luminance contrast processing in humans. *NeuroImage*, **2016**, 139, 415-426	7.9	10
77	Local landmark alignment for high-resolution fMRI group studies: toward a fine cortical investigation of hand movements in human. *Journal of Neuroscience Methods*, **2013**, 218, 83-95	3	9
76	Spatial selectivity of the watercolor effect. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2014**, 31, A1-6	1.8	9
75	Deep Learning Models to Study the Early Stages of Parkinson's Disease **2020**,		8
74	The NewGuide Project: Guidelines, Information Sharing and Learning from Exceptions. *Lecture Notes in Computer Science*, **2003**, 163-167	0.9	8
73	Statistical shape modeling of low level visual area borders. *Medical Image Analysis*, **2004**, 8, 353-60	15.4	8
72	Knowledge-based information management in intensive care and anesthesia. *Artificial Intelligence in Medicine*, **2000**, 19, 185-7	7.4	8
71	Effective domain-dependent reuse in medical knowledge bases. *Journal of Biomedical Informatics*, **1995**, 28, 403-432		8
70	NeuroLOG: sharing neuroimaging data using an ontology-based federated approach **2011**, 2011, 472-80	0.7	8
69	Magnetic resonance imaging does not reveal structural alterations in the brain of grapheme-color synesthetes. *PLoS ONE*, **2018**, 13, e0194422	3.7	8

68	Neural circuits for long-range color filling-in. *NeuroImage*, **2018**, 181, 30-43	7.9	7
67	The relationship between positive or negative phrasing and patientsScoping with lateral epicondylitis. *Journal of Shoulder and Elbow Surgery*, **2014**, 23, 567-72	4.3	7
66	Feasibility and reliability of an automated controller of inspired oxygen concentration during mechanical ventilation. *Critical Care*, **2014**, 18, R35	10.8	7
65	Quantitative evaluation of fMRI retinotopic maps, from V1 to V4, for cognitive experiments. *Frontiers in Human Neuroscience*, **2015**, 9, 277	3.3	7
64	Global integration of local color differences in transparency perception: An fMRI study. *Visual Neuroscience*, **2006**, 23, 357-64	1.7	7
63	MRF Agent Based Segmentation: Application to MRI Brain Scans. *Lecture Notes in Computer Science*, **2007**, 13-23	0.9	7
62	Fully Bayesian joint model for MR brain scan tissue and structure segmentation. *Lecture Notes in Computer Science*, **2008**, 11, 1066-74	0.9	7
61	fMRI retinotopic mapping at 3 T: benefits gained from correcting the spatial distortions due to static field inhomogeneity. *Journal of Vision*, **2010**, 10, 30	0.4	6
60	Grid-wide neuroimaging data federation in the context of the NeuroLOG project. *Studies in Health Technology and Informatics*, **2010**, 159, 112-23	0.5	6
59	Visual Dysfunction of the Superior Colliculus in De Novo Parkinsonian Patients. *Annals of Neurology*, **2020**, 87, 533-546	9.4	5
58	Multi-agent Approach for Image Processing: A Case Study for MRI Human Brain Scans Interpretation. *Lecture Notes in Computer Science*, **2003**, 91-100	0.9	5
57	Sub-acute and Chronic Ischemic Stroke Lesion MRI Segmentation. *Lecture Notes in Computer Science* , **2018**, 111-122	0.9	5
56	Interactive Decision Support for Medical Planning. *Lecture Notes in Computer Science*, **2003**, 335-339	0.9	5
55	Small Animal Shanoir (SAS) A Cloud-Based Solution for Managing Preclinical MR Brain Imaging Studies. *Frontiers in Neuroinformatics*, **2020**, 14, 20	3.9	4
54	A Multicenter Preclinical MRI Study: Definition of Rat Brain Relaxometry Reference Maps. *Frontiers in Neuroinformatics*, **2020**, 14, 22	3.9	4
53	Temporal scenario recognition for intelligent patient monitoring. *Lecture Notes in Computer Science* , **1997**, 331-342	0.9	4
52	Learning-Free Text Categorization. *Lecture Notes in Computer Science*, **2003**, 199-208	0.9	4
51	Using Description Logics for Managing Medical Terminologies. *Lecture Notes in Computer Science*, **2003**, 61-70	0.9	4

50	LOCUS: local cooperative unified segmentation of MRI brain scans **2007**, 10, 219-27		4
49	Multiple sclerosis lesions segmentation from multiple experts: The MICCAI 2016 challenge dataset. *NeuroImage*, **2021**, 244, 118589	7.9	4
48	Knowledge-Based Query Expansion over a Medical Terminology Oriented Ontology on the Web. *Lecture Notes in Computer Science*, **2003**, 209-213	0.9	3
47	A Joint Bayesian Framework for MR Brain Scan Tissue and Structure Segmentation Based on Distributed Markovian Agents. *Studies in Computational Intelligence*, **2010**, 81-101	0.8	3
46	Use of Pattern-Information Analysis in Vision Science: A Pragmatic Examination. *Lecture Notes in Computer Science*, **2012**, 103-110	0.9	3
45	Variational solution to the joint detection estimation of brain activity in fMRI. *Lecture Notes in Computer Science*, **2011**, 14, 260-8	0.9	3
44	Modeling medical reasoning with the Event Calculus: an application to the management of mechanical ventilation. *Lecture Notes in Computer Science*, **1995**, 79-90	0.9	3
43	Multivariate pattern analysis of fMRI data for imaginary and real colours in grapheme-colour synaesthesia. *European Journal of Neuroscience*, **2020**, 52, 3434-3456	3.5	2
42	Computerised Advice on Drug Dosage Decisions in Childhood Leukaemia: A Method and a Safety Strategy. *Lecture Notes in Computer Science*, **2003**, 158-162	0.9	2
41	Classification of Ovarian Tumors Using Bayesian Least Squares Support Vector Machines. *Lecture Notes in Computer Science*, **2003**, 219-228	0.9	2
40	Representing medical context using rule-based object-oriented programming techniques. *Lecture Notes in Computer Science*, **1995**, 423-424	0.9	2
39	The Use of the UMLS Knowledge Sources for the Design of a Domain Specific Ontology: A Practical Experience in Blood Transfusion. *Lecture Notes in Computer Science*, **1999**, 249-253	0.9	2
38	Modulation of visual hallucinations originating from deafferented occipital cortex by robotized transcranial magnetic stimulation. *Clinical Neurophysiology*, **2020**, 131, 1728-1730	4.3	1
37	Quantifying the watercolor effect: from stimulus properties to neural models. *Frontiers in Human Neuroscience*, **2014**, 8, 805	3.3	1
36	Combination of nonlinear registration methods with high resolution fMRI for a fine exploration of human primary motor hand area. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2011**, 2011, 6989-92	0.9	1
35	Image Processing and Display. *International Journal of Computer Assisted Radiology and Surgery*, **2006**, 1, 17-86	3.9	1
34	Effective connectivity in subcortical visual structures in de novo Patients with Parkinson's Disease. *NeuroImage: Clinical*, **2021**, 33, 102906	5.3	1
33	A Human-Machine Cooperative Approach for Time Series Data Interpretation. *Lecture Notes in Computer Science*, **2007**, 3-12	0.9	1

32	Neural correlates of intra-saccadic motion perception. *Journal of Vision*, **2021**, 21, 19	0.4	1
31	Human/Computer Interaction to Learn Scenarios from ICU Multivariate Time Series. *Lecture Notes in Computer Science*, **2005**, 424-428	0.9	1
30	Traumatic Brain Lesion Quantification Based on Mean Diffusivity Changes. *Lecture Notes in Computer Science*, **2018**, 88-99	0.9	1
29	Linking Clinical Guidelines with Formal Representations. *Lecture Notes in Computer Science*, **2003**, 152-157	0.9	1
28	A Multicenter Preclinical MRI Study: Definition of Rat Brain Relaxometry Reference Maps		1
27	Neural circuits for long-range color filling-in		1
26	Assessment of Tissue Injury in Severe Brain Trauma. *Lecture Notes in Computer Science*, **2016**, 57-68	0.9	1
25	Magnetic resonance imaging does not reveal structural alterations in the brain of synesthetes		1
24	A conditional random field approach for coupling local registration with robust tissue and structure segmentation. *Lecture Notes in Computer Science*, **2009**, 12, 540-8	0.9	1
23	Dynamic Adaptation of Cooperative Agents for MRI Brain Scans Segmentation. *Lecture Notes in Computer Science*, **2001**, 349-358	0.9	1
22	A Multi-agent System for MRI Brain Segmentation. *Lecture Notes in Computer Science*, **1999**, 423-432	0.9	1
21	D[illegible]ination des aires visuelles r[illegible]tinotopiques chez le sujet individuel [illegible]aide de l[illegible]RM fonctionnelle. *Comptes Rendus Chimie*, **2004**, 7, 207-212	2.7	0
20	Closed-Loop Systems for Mechanical Ventilation **2003**, 348-359		
19	Syst[illegible]mes automatis[illegible] en ventilation artificielle. *IRBM News*, **2005**, 26, 51-54		
18	High impedance mechanical ventilator for small animals: use of programmable controller. *Pflugers Archiv European Journal of Physiology*, **1992**, 420, 136-9	4.6	
17	The Ventilator of Tomorrow **2006**, 227-237		
16	Text Categorization prior to Indexing for the CISMEF Health Catalogue. *Lecture Notes in Computer Science*, **2003**, 81-85	0.9	
15	Statistical Shape Modeling of Unfolded Retinotopic Maps for a Visual Areas Probabilistic Atlas. *Lecture Notes in Computer Science*, **2003**, 705-713	0.9	

14	WoundCare: A Palm Pilot-Based Expert System for the Treatment of Pressure Ulcers. *Lecture Notes in Computer Science*, **2003**, 345-349	0.9
13	Speech Interfaces for Point-of-Care Guideline Systems. *Lecture Notes in Computer Science*, **2003**, 76-80	0.9
12	Learning Derived Words from Medical Corpora. *Lecture Notes in Computer Science*, **2003**, 189-198	0.9
11	Managing Theoretical Single-Disease Guideline Recommendations for Actual Multiple-Disease Patients. *Lecture Notes in Computer Science*, **2003**, 168-172	0.9
10	Combining Supervised and Unsupervised Methods to Support Early Diagnosis of Hepatocellular Carcinoma. *Lecture Notes in Computer Science*, **2003**, 239-243	0.9
9	Modeling Multimedia and Temporal Aspects of Semistructured Clinical Data. *Lecture Notes in Computer Science*, **2003**, 36-40	0.9
8	Robots as Models of the Brain: What Can We Learn from Modelling Rat Navigation and Infant Imitation Games?. *Lecture Notes in Computer Science*, **2003**, 377-385	0.9
7	Compliance with the Hyperlipidaemia Consensus: Clinicians versus the Computer. *Lecture Notes in Computer Science*, **2003**, 340-344	0.9
6	Linking Rules to Terminologies and Applications in Medical Planning. *Lecture Notes in Computer Science*, **2003**, 214-218	0.9
5	Patch vs. Global Image-Based Unsupervised Anomaly Detection in MR Brain Scans of Early Parkinsonian Patients. *Lecture Notes in Computer Science*, **2021**, 34-43	0.9
4	Pourquoi et comment favoriser le partage en neuro-imagerie ?. *Annales Des Mines - Réalités Industrielles*, **2021**, Août 2021, 23-26	0.1
3	Automated Quantification of Brain Lesion Volume From Post-trauma MR Diffusion-Weighted Images.. *Frontiers in Neurology*, **2021**, 12, 740603	4.1
2	Subtle anomaly detection: Application to brain MRI analysis of de novo Parkinsonian patients.. *Artificial Intelligence in Medicine*, **2022**, 125, 102251	7.4
1	No Structural Differences Are Revealed by VBM in 'De Novo'Parkinsonian Patients. *Studies in Health Technology and Informatics*, **2019**, 264, 268-272	0.5