Roberto Bellotti

List of Publications by Year
in descending order

98	2,473	257101	233125
papers	citations	24	45
		h-index	g-index

100	100	100	3276
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Standardized evaluation of algorithms for computer-aided diagnosis of dementia based on structural MRI: The CADDementia challenge. NeuroImage, 2015, 111, 562-579.	2.1	266
2	Comparing and combining algorithms for computer-aided detection of pulmonary nodules in computed tomography scans: The ANODE09 study. Medical Image Analysis, 2010, 14, 707-722.	7.0	245
3	Local MRI analysis approach in the diagnosis of early and prodromal Alzheimer's disease. NeuroImage, 2011, 58, 469-480.	2.1	161
4	Complex networks reveal early MRI markers of Parkinson's disease. Medical Image Analysis, 2018, 48, 12-24.	7.0	112
5	Deep learning reveals Alzheimer's disease onset in MCI subjects: Results from an international challenge. Journal of Neuroscience Methods, 2018, 302, 3-9.	1.3	104
6	Integrating longitudinal information in hippocampal volume measurements for the early detection of Alzheimer's disease. NeuroImage, 2016, 125, 834-847.	2.1	76
7	Automatic Lung Segmentation in CT Images with Accurate Handling of the Hilar Region. Journal of Digital Imaging, 2011, 24, 11-27.	1.6	74
8	Crowdsourced estimation of cognitive decline and resilience in Alzheimer's disease. Alzheimer's and Dementia, 2016, 12, 645-653.	0.4	72
9	DTI measurements for Alzheimer's classification. Physics in Medicine and Biology, 2017, 62, 2361-2375.	1.6	57
10	Radiomic Analysis in Contrast-Enhanced Spectral Mammography for Predicting Breast Cancer Histological Outcome. Diagnostics, 2020, 10, 708.	1.3	57
11	Combination of computer-aided detection algorithms for automatic lung nodule identification. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 455-464.	1.7	46
12	Multiplex Networks for Early Diagnosis of Alzheimer's Disease. Frontiers in Aging Neuroscience, 2018, 10, 365.	1.7	43
13	Hausdorff clustering of financial time series. Physica A: Statistical Mechanics and Its Applications, 2007, 379, 635-644.	1.2	41
14	Deep Learning and Multiplex Networks for Accurate Modeling of Brain Age. Frontiers in Aging Neuroscience, 2019, 11, 115.	1.7	41
15	Fully Automated Support System for Diagnosis of Breast Cancer in Contrast-Enhanced Spectral Mammography Images. Journal of Clinical Medicine, 2019, 8, 891.	1.0	40
16	Automatic analysis of medial temporal lobe atrophy from structural MRIs for the early assessment of Alzheimer disease. Medical Physics, 2009, 36, 3737-3747.	1.6	39
17	Predicting brain age with complex networks: From adolescence to adulthood. NeuroImage, 2021, 225, 117458.	2.1	39
18	Radiomics Analysis on Contrast-Enhanced Spectral Mammography Images for Breast Cancer Diagnosis: A Pilot Study. Entropy, 2019, 21, 1110.	1.1	38

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19	Explainable Deep Learning for Personalized Age Prediction With Brain Morphology. Frontiers in Neuroscience, 2021, 15, 674055.	1.4	38
20	Ensemble Discrete Wavelet Transform and Gray-Level Co-Occurrence Matrix for Microcalcification Cluster Classification in Digital Mammography. Applied Sciences (Switzerland), 2019, 9, 5388.	1.3	34
21	A machine learning approach on multiscale texture analysis for breast microcalcification diagnosis. BMC Bioinformatics, 2020, 21, 91.	1.2	34
22	Functional Connectivity of EEG Signals Under Laser Stimulation in Migraine. Frontiers in Human Neuroscience, 2015, 9, 640.	1.0	28
23	Alzheimer's disease diagnosis based on the Hippocampal Unified Multi-Atlas Network (HUMAN) algorithm. BioMedical Engineering OnLine, 2018, 17, 6.	1.3	28
24	Multi-Time-Scale Features for Accurate Respiratory Sound Classification. Applied Sciences (Switzerland), 2020, 10, 8606.	1.3	27
25	Communicability disruption in Alzheimer's disease connectivity networks. Journal of Complex Networks, 2019, 7, 83-100.	1.1	26
26	Association between miRNAs expression and cognitive performances of Pediatric Multiple Sclerosis patients: A pilot study. Brain and Behavior, 2019, 9, e01199.	1.0	26
27	Feature Selection Based on Machine Learning in MRIs for Hippocampal Segmentation. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-10.	0.7	25
28	3-D object segmentation using ant colonies. Pattern Recognition, 2010, 43, 1476-1490.	5.1	24
29	Automated hippocampal segmentation in 3D MRI using random undersampling with boosting algorithm. Pattern Analysis and Applications, 2016, 19, 579-591.	3.1	24
30	Modelling cognitive loads in schizophrenia by means of new functional dynamic indexes. NeuroImage, 2019, 195, 150-164.	2.1	24
31	Breath Analysis for Early Detection of Malignant Pleural Mesothelioma: Volatile Organic Compounds (VOCs) Determination and Possible Biochemical Pathways. Cancers, 2020, 12, 1262.	1.7	24
32	A Roadmap towards Breast Cancer Therapies Supported by Explainable Artificial Intelligence. Applied Sciences (Switzerland), 2021, 11, 4881.	1.3	24
33	A novel approach to brain connectivity reveals early structural changes in Alzheimer's disease. Physiological Measurement, 2018, 39, 074005.	1.2	22
34	A complex network approach reveals a pivotal substructure of genes linked to schizophrenia. PLoS ONE, 2018, 13, e0190110.	1.1	22
35	A Clinical Decision Support System for Predicting Invasive Breast Cancer Recurrence: Preliminary Results. Frontiers in Oncology, 2021, 11, 576007.	1.3	21
36	Machine Learning and DWI Brain Communicability Networks for Alzheimer's Disease Detection. Applied Sciences (Switzerland), 2020, 10, 934.	1.3	20

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37	Shannon entropy approach reveals relevant genes in Alzheimer's disease. PLoS ONE, 2019, 14, e0226190.	1.1	19
38	A fuzzy-based system reveals Alzheimer's Disease onset in subjects with Mild Cognitive Impairment. Physica Medica, 2017, 38, 36-44.	0.4	18
39	Machine Learning for Cloud Detection of Globally Distributed Sentinel-2 Images. Remote Sensing, 2020, 12, 2355.	1.8	18
40	Automatic temporal lobe atrophy assessment in prodromal AD: Data from the DESCRIPA study. Alzheimer's and Dementia, 2014, 10, 456-467.	0.4	16
41	Hausdorff clustering. Physical Review E, 2008, 78, 046112.	0.8	15
42	A Novel Synchronization-Based Approach for Functional Connectivity Analysis. Complexity, 2017, 2017, 1-12.	0.9	15
43	Multivariate regression analysis of structural MRI connectivity matrices in Alzheimer's disease. PLoS ONE, 2017, 12, e0187281.	1.1	15
44	Territorial bias in university rankings: a complex network approach. Scientific Reports, 2022, 12, 4995.	1.6	15
45	A theoretical study on phase-contrast mammography with Thomson-scattering x-ray sources. Medical Physics, 2009, 36, 4644-4653.	1.6	14
46	Communicability Characterization of Structural DWI Subcortical Networks in Alzheimer's Disease. Entropy, 2019, 21, 475.	1.1	14
47	Hough transform for clustered microcalcifications detection in full-field digital mammograms. , 2017, , .		14
48	An equity-oriented rethink of global rankings with complex networks mapping development. Scientific Reports, 2020, 10, 18046.	1.6	13
49	The PERSON project: a serious brain-computer interface game for treatment in cognitive impairment. Health and Technology, 2019, 9, 123-133.	2.1	12
50	Extensive Evaluation of Morphological Statistical Harmonization for Brain Age Prediction. Brain Sciences, 2020, 10, 364.	1.1	12
51	Sustainable development goals: conceptualization, communication and achievement synergies in a complex network framework. Applied Network Science, 2022, 7, 14.	0.8	12
52	Association between Structural Connectivity and Generalized Cognitive Spectrum in Alzheimer's Disease. Brain Sciences, 2020, 10, 879.	1.1	11
53	The interaction between cannabis use and a CB1-related polygenic co-expression index modulates dorsolateral prefrontal activity during working memory processing. Brain Imaging and Behavior, 2021, 15, 288-299.	1.1	11
54	Brain Age Prediction With Morphological Features Using Deep Neural Networks: Results From Predictive Analytic Competition 2019. Frontiers in Psychiatry, 2020, 11, 619629.	1.3	11

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55	Analysis of X-ray Structures of Matrix Metalloproteinases via Chaotic Map Clustering. BMC Bioinformatics, 2010, 11, 500.	1.2	10
56	Editorial: Advanced physical methods in brain research. European Physical Journal Plus, 2012, 127, 1.	1.2	10
57	A Machine Learning Approach to Parkinsonâ€™s Disease Blood Transcriptomics. Genes, 2022, 13, 727.	1.0	10
58	Multi-site harmonization of MRI data uncovers machine-learning discrimination capability in barely separable populations: An example from the ABIDE dataset. NeuroImage: Clinical, 2022, 35, 103082.	1.4	10
59	Combined mixed approach algorithm for inâ€‘line phaseâ€‘contrast xâ€‘ray imaging. Medical Physics, 2010, 37, 3817-3827.	1.6	9
60	Random Forest Classification for Hippocampal Segmentation in 3D MR Images. , 2013, , .		9
61	Potential energy of complex networks: a quantum mechanical perspective. Scientific Reports, 2020, 10, 18387.	1.6	9
62	Economic Interplay Forecasting Business Success. Complexity, 2021, 2021, 1-12.	0.9	9
63	A Multiplex Network Model to Characterize Brain Atrophy in Structural MRI. Springer Proceedings in Physics, 2017, , 189-198.	0.1	8
64	A primer on machine learning techniques for genomic applications. Computational and Structural Biotechnology Journal, 2021, 19, 4345-4359.	1.9	8
65	Deconvolution by finite-size-source effects of x-ray phase-contrast images. Medical Physics, 2011, 38, 1951-1961.	1.6	7
66	A Proposal of Quantum-Inspired Machine Learning for Medical Purposes: An Application Case. Mathematics, 2021, 9, 410.	1.1	7
67	Complex Network Modelling of Originâ€“Destination Commuting Flows for the COVID-19 Epidemic Spread Analysis in Italian Lombardy Region. Applied Sciences (Switzerland), 2021, 11, 4381.	1.3	7
68	A dynamical approach to operational risk measurement. Journal of Operational Risk, 2011, 6, 3-19.	0.0	7
69	Satellite data and machine learning reveal a significant correlation between NO_2 and COVID-19 mortality. Environmental Research, 2022, 204, 111970.	3.7	6
70	Psychological counseling in the Italian academic context: Expected needs, activities, and target population in a large sample of students. PLoS ONE, 2022, 17, e0266895.	1.1	6
71	The Channeler Ant Model: Object segmentation with virtual ant colonies. , 2008, , .		5
72	Fully automated hippocampus segmentation with virtual ant colonies. , 2012, , .		5

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73	PSI Clustering for the Assessment of Underground Infrastructure Deterioration. Remote Sensing, 2020, 12, 3681.	1.8	5
74	Characterization of real-world networks through quantum potentials. PLoS ONE, 2021, 16, e0254384.	1.1	5
75	A bioinformatics knowledge discovery in text application for grid computing. BMC Bioinformatics, 2009, 10, S23.	1.2	4
76	Algorithms for automatic detection of lung nodules in CT scans. , 2011, , .		4
77	Computer Aided Detection System for Prediction of the Malaise during Hemodialysis. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-10.	0.7	4
78	Complex networks and public funding: the case of the 2007-2013 Italian program. EPJ Data Science, 2015, 4, .	1.5	3
79	Topological Complex Networks Properties for Gene Community Detection Strategy: DRD2 Case Study. Springer Proceedings in Physics, 2017, , 199-208.	0.1	3
80	Applications of PDEs inpainting to magnetic particle imaging and corneal topography. Opuscula Mathematica, 2019, 39, 453-482.	0.3	3
81	An innovative lung segmentation algorithm in CT images with accurate delimitation of the hilus pulmonis. , 2008, , .		2
82	Hippocampal segmentation by Random Forest classification. , 2011, , .		2
83	Multidimensional Neuroimaging Processing in ReCaS Datacenter. Lecture Notes in Computer Science, 2019, , 468-477.	1.0	2
84	Machine learning for the assessment of Alzheimer's disease through DTI. , 2017, , .		2
85	Automatic Localization of the Hippocampal Region in MR Images to Asses Early Diagnosis of Alzheimerâ€™s Disease in MCI Patients. , 2008, , .		1
86	Effective connectivity and cortical information flow under visual stimulation in migraine with aura. , 2013, , .		1
87	Salient Networks: A Novel Application to Study Brain Connectivity. Lecture Notes in Computer Science, 2017, , 444-453.	1.0	1
88	Salient networks: a novel application to study Alzheimer disease. BioMedical Engineering OnLine, 2018, 17, 162.	1.3	1
89	Individual Topological Analysis of Synchronization-Based Brain Connectivity. Applied Sciences (Switzerland), 2020, 10, 3275.	1.3	1
90	Structural and functional brain imaging in the assessment of prodromal Alzheimer's disease. , 2011, , .		0

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91	A Dynamical Model for Forecasting Operational Losses. SSRN Electronic Journal, 2011, , .	0.4	0
92	Improving the channeler ant model for lung CT analysis. , 2011, , .		0
93	3D measurements for tumours malignancies early diagnosis. , 2011, , .		0
94	An Hippocampal Segmentation Tool Within an Open Cloud Infrastructure. Lecture Notes in Computer Science, 2015, , 193-200.	1.0	0
95	Digital Image Processing in Medical Applications, April 22, 2008. , 2010, , 457-473.		0
96	A multi-layer MRI description of Parkinson's disease. , 2017, , .		0
97	Association between MRI structural features and cognitive measures in pediatric multiple sclerosis. , 2017, , .		0
98	Age Related Topological Analysis of Synchronization-Based Functional Connectivity. Studies in Computational Intelligence, 2019, , 652-662.	0.7	0