Alessandra Retico

List of Publications by Year
in descending order

117 papers	3,375 citations	218662 26 h-index	168376 53 g-index
123 all docs	123 docs citations	123 times ranked	5355 citing authors

#	Article	IF	Citations
1	Cortical and Subcortical Brain Morphometry Differences Between Patients With Autism Spectrum Disorder and Healthy Individuals Across the Lifespan: Results From the ENIGMA ASD Working Group. American Journal of Psychiatry, 2018, 175, 359-369.	7.2	356
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.	11.6	245
3	Scalar flavour-changing neutral currents in the large-tan(Î²) limit. Journal of High Energy Physics, 2001, 2001, 001-001.	4.7	182
4	Altered structural brain asymmetry in autism spectrum disorder in a study of 54 datasets. Nature Communications, 2019, 10, 4958.	12.8	167
5	Local MRI analysis approach in the diagnosis of early and prodromal Alzheimer's disease. NeuroImage, 2011, 58, 469-480.	4.2	161
6	Virtual Histology of Cortical Thickness and Shared Neurobiology in 6 Psychiatric Disorders. JAMA Psychiatry, 2021, 78, 47.	11.0	136
7	Subcortical Brain Volume, Regional Cortical Thickness, and Cortical Surface Area Across Disorders: Findings From the ENIGMA ADHD, ASD, and OCD Working Groups. American Journal of Psychiatry, 2020, 177, 834-843.	7.2	120
8	Randomized trial on the effects of a combined physical/cognitive training in aged MCI subjects: the Train the Brain study. Scientific Reports, 2017, 7, 39471.	3.3	108
9	Female children with autism spectrum disorder: An insight from mass-univariate and pattern classification analyses. NeuroImage, 2012, 59, 1013-1022.	4.2	95
10	A completely automated CAD system for mass detection in a large mammographic database. Medical Physics, 2006, 33, 3066-3075.	3.0	92
11	A CAD system for nodule detection in lowâ€dose lung CTs based on region growing and a new active contour model. Medical Physics, 2007, 34, 4901-4910.	3.0	91
12	Mammogram Segmentation by Contour Searching and Mass Lesions Classification With Neural Network. IEEE Transactions on Nuclear Science, 2006, 53, 2827-2833.	2.0	86
13	Lung nodule detection in low-dose and thin-slice computed tomography. Computers in Biology and Medicine, 2008, 38, 525-534.	7.0	80
14	The effect of gender on the neuroanatomy of children with autism spectrum disorders: a support vector machine case-control study. Molecular Autism, 2016, 7, 5.	4.9	75
15	Characterization of mammographic masses using a gradient-based segmentation algorithm and a neural classifier. Computers in Biology and Medicine, 2007, 37, 1479-1491.	7.0	73
16	Bs,dâ†'ell+ellâ^'andKLâ†'ell+ellâ^'in SUSY models with non-minimal sources of flavour mixing. Journal of High Energy Physics, 2002, 2002, 063-063.	4.7	70
17	Multi-site repeatability and reproducibility of MR fingerprinting of the healthy brain at 1.5 and 3.0â€¯T. NeuroImage, 2019, 195, 362-372.	4.2	67
18	Consortium neuroscience of attention deficit/hyperactivity disorder and autism spectrum disorder: The <scp>ENIGMA</scp> adventure. Human Brain Mapping, 2022, 43, 37-55.	3.6	61

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19	Gray Matter Alterations in Young Children with Autism Spectrum Disorders: Comparing Morphometry at the Voxel and Regional Level. Journal of Neuroimaging, 2015, 25, 866-874.	2.0	54
20	<scp>H</scp>ippocampal subfields at ultra high field MRI: <scp>A</scp>n overview of segmentation and measurement methods. Hippocampus, 2017, 27, 481-494.	1.9	51
21	Combination of computer-aided detection algorithms for automatic lung nodule identification. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 455-464.	2.8	46
22	Predictive Models Based on Support Vector Machines: Wholeâ€Brain versus Regional Analysis of Structural MRI in the Alzheimer's Disease. Journal of Neuroimaging, 2015, 25, 552-563.	2.0	42
23	Pleural nodule identification in low-dose and thin-slice lung computed tomography. Computers in Biology and Medicine, 2009, 39, 1137-1144.	7.0	36
24	Strategies to develop radiomics and machine learning models for lung cancer stage and histology prediction using small data samples. Physica Medica, 2021, 90, 13-22.	0.7	32
25	Evaluation of the intra- and inter-method agreement of brain MRI segmentation software packages: A comparison between SPM12 and FreeSurfer v6.0. Physica Medica, 2019, 64, 261-272.	0.7	30
26	The effect of age, sex and clinical features on the volume of Corpus Callosum in preâ€schoolers with Autism Spectrum Disorder: a caseâ€“control study. European Journal of Neuroscience, 2018, 47, 568-578.	2.6	29
27	An in-beam PET system for monitoring ion-beam therapy: test on phantoms using clinical 62 MeV protons. Journal of Instrumentation, 2014, 9, C04005-C04005.	1.2	27
28	Three dimensional MRF obtains highly repeatable and reproducible multi-parametric estimations in the healthy human brain at 1.5T and 3T. NeuroImage, 2021, 226, 117573.	4.2	26
29	Distributed medical images analysis on a Grid infrastructure. Future Generation Computer Systems, 2007, 23, 475-484.	7.5	25
30	Evaluation of Altered Functional Connections in Male Children With Autism Spectrum Disorders on Multiple-Site Data Optimized With Machine Learning. Frontiers in Psychiatry, 2019, 10, 620.	2.6	25
31	Subtly altered topological asymmetry of brain structural covariance networks in autism spectrum disorder across 43 datasets from the ENIGMA consortium. Molecular Psychiatry, 2022, 27, 2114-2125.	7.9	25
32	Rehabilitative Interventions and Brain Plasticity in Autism Spectrum Disorders: Focus on MRI-Based Studies. Frontiers in Neuroscience, 2016, 10, 139.	2.8	24
33	Retrospective rigid motion correction of threeâ€dimensional magnetic resonance fingerprinting of the human brain. Magnetic Resonance in Medicine, 2020, 84, 2606-2615.	3.0	23
34	MAGIC-5: an Italian mammographic database of digitised images for research. Radiologia Medica, 2008, 113, 477-485.	7.7	22
35	Autism Spectrum Disorder and Childhood Apraxia of Speech: Early Language-Related Hallmarks across Structural MRI Study. Journal of Personalized Medicine, 2020, 10, 275.	2.5	22
36	GPCALMA: a Grid-based Tool for Mammographic Screening. Methods of Information in Medicine, 2005, 44, 244-248.	1.2	21

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37	One-Class Support Vector Machines Identify the Language and Default Mode Regions As Common Patterns of Structural Alterations in Young Children with Autism Spectrum Disorders. Frontiers in Neuroscience, 2016, 10, 306.	2.8	21
38	B0â€“ mixing and decay constants with the non-perturbatively improved action. Nuclear Physics B, 2001, 618, 241-258.	2.5	20
39	Dealing with confounders and outliers in classification medical studies: The Autism Spectrum Disorders case study. Artificial Intelligence in Medicine, 2020, 108, 101926.	6.5	20
40	Brainstem enlargement in preschool children with autism: Results from an intermethod agreement study of segmentation algorithms. Human Brain Mapping, 2019, 40, 7-19.	3.6	19
41	A theoretical prediction of the B_s meson lifetime difference. European Physical Journal C, 2000, 18, 157-166.	3.9	18
42	Temporal lobe connects regression and macrocephaly to autism spectrum disorders. European Child and Adolescent Psychiatry, 2016, 25, 421-429.	4.7	18
43	Vascular Function Is Improved After an Environmental Enrichment Program. Hypertension, 2018, 71, 1218-1225.	2.7	18
44	Semiautomated Evaluation of the Primary Motor Cortex in Patients with Amyotrophic Lateral Sclerosis at 3T. American Journal of Neuroradiology, 2018, 39, 63-69.	2.4	17
45	The MAGIC-5 project: medical applications on a grid infrastructure connection. , 0, , .		16
46	Detection of Interfractional Morphological Changes in Proton Therapy: A Simulation and In Vivo Study With the INSIDE In-Beam PET. Frontiers in Physics, 2021, 8, .	2.1	16
47	An automatic system to discriminate malignant from benign massive lesions on mammograms. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 596-600.	1.6	15
48	An automated system for lung nodule detection in low-dose computed tomography. , 2007, , .		15
49	Effects of combined training on neuropsychiatric symptoms and quality of life in patients with cognitive decline. Aging Clinical and Experimental Research, 2021, 33, 1249-1257.	2.9	15
50	VALIDATION OF NUMERICAL APPROACHES FOR ELECTROMAGNETIC CHARACTERIZATION OF MAGNETIC RESONANCE RADIOFREQUENCY COILS. Progress in Electromagnetics Research M, 2013, 29, 121-136.	0.9	14
51	Neuroimaging-based methods for autism identification: a possible translational application?. Functional Neurology, 2014, 29, 231-9.	1.3	14
52	Numerical and Workbench Design of 2.35 T Double-Tuned (Â¹H/Â²Â³Na) Nested RF Birdcage Coils Suitable for Animal Size MRI. IEEE Transactions on Medical Imaging, 2020, 39, 3175-3186.	8.9	13
53	An estimate of the K0-K0bar mixing amplitude. Journal of High Energy Physics, 2001, 2001, 012-012.	4.7	11
54	Mammogram segmentation by contour searching and massive lesion classification with neural network. , 0, , .		11

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55	A voxel-based neural approach (VBNA) to identify lung nodules in the ANODE09 study. , 2009, , .		11
56	Measuring the effects of confounders in medical supervised classification problems: the Confounding Index (CI). Artificial Intelligence in Medicine, 2020, 103, 101804.	6.5	11
57	Neuroimaging-based methods for autism identification: a possible translational application?. Functional Neurology, 0, , .	1.3	11
58	Virtual Ontogeny of Cortical Growth Preceding Mental Illness. Biological Psychiatry, 2022, 92, 299-313.	1.3	11
59	Lung Nodule Detection in Screening Computed Tomography. , 2006, , .		10
60	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.	2.7	10
61	Preprocessing methods for nodule detection in lung CT. International Congress Series, 2005, 1281, 1099-1103.	0.2	9
62	Investigation of maximum local specific absorption rate in 7â€‰T magnetic resonance with respect to load size by use of electromagnetic simulations. Bioelectromagnetics, 2015, 36, 358-366.	1.6	9
63	A Degenerate Birdcage with Integrated Tx/Rx Switches and Butler Matrix for the Human Limbs at 7ÂT. Applied Magnetic Resonance, 2017, 48, 307-326.	1.2	9
64	Lower gray matter volumes of frontal lobes and insula in adolescents with anorexia nervosa restricting type: Findings from a Brain Morphometry Study. European Psychiatry, 2020, 63, e27.	0.2	9
65	Quantification of pulmonary involvement in COVID-19 pneumonia by means of a cascade of two U-nets: training and assessment on multiple datasets using different annotation criteria. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 229-237.	2.8	9
66	Multi-scale analysis of lung computed tomography images. Journal of Instrumentation, 2007, 2, P09007-P09007.	1.2	8
67	Localization of anatomical changes in patients during proton therapy with inâ€beam PET monitoring: A voxelâ€based morphometry approach exploiting Monte Carlo simulations. Medical Physics, 2022, 49, 23-40.	3.0	8
68	Convolutional Neural Networks for Breast Density Classification: Performance and Explanation Insights. Applied Sciences (Switzerland), 2022, 12, 148.	2.5	8
69	Quadrature birdcage coil with distributed capacitors for 7.0 T magnetic resonance data acquisition of small animals. Concepts in Magnetic Resonance Part B, 2014, 44, 83-88.	0.7	7
70	ARIANNA: A research environment for neuroimaging studies in autism spectrum disorders. Computers in Biology and Medicine, 2017, 87, 1-7.	7.0	7
71	Enhancing the impact of Artificial Intelligence in Medicine: A joint AIFM-INFN Italian initiative for a dedicated cloud-based computing infrastructure. Physica Medica, 2021, 91, 140-150.	0.7	7
72	A Scalable System for Microcalcification Cluster Automated Detection in a Distributed Mammographic Database. , 0, , .		6

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73	A scalable computer-aided detection system for microcalcification cluster identification in a pan-European distributed database of mammograms. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 601-605.	1.6	6
74	Brain Hemodynamic Intermediate Phenotype Links Vitamin B₁₂ to Cognitive Profile of Healthy and Mild Cognitive Impaired Subjects. Neural Plasticity, 2019, 2019, 1-11.	2.2	6
75	Computer-aided detection for pulmonary nodule identification: improving the radiologistâ€˜s performance?. Imaging in Medicine, 2013, 5, 249-263.	0.0	5
76	First tests for an online treatment monitoring system with in-beam PET for proton therapy. Journal of Instrumentation, 2015, 10, C01010-C01010.	1.2	5
77	A Hardware Implementation of a Brain Inspired Filter for Image Processing. IEEE Transactions on Nuclear Science, 2017, 64, 1374-1381.	2.0	5
78	T-odd correlations in chargedKl4decays. Physical Review D, 2002, 65, .	4.7	4
79	GPCALMA, a mammographic CAD in a GRID connection. International Congress Series, 2003, 1256, 944-949.	0.2	4
80	Algorithms for automatic detection of lung nodules in CT scans. , 2011, , .		4
81	RF coil design for low and high field MRI: Numerical methods and measurements. , 2011, , .		4
82	Subject-specific knee SAR prediction using a degenerate birdcage at 7T. , 2018, , .		4
83	Node Centrality Measures Identify Relevant Structural MRI Features of Subjects with Autism. Brain Sciences, 2021, 11, 498.	2.3	4
84	GPCALMA: a Grid-based tool for mammographic screening. Methods of Information in Medicine, 2005, 44, 244-8.	1.2	4
85	Characterization of a Single Photon Counting Imaging System by Transfer Function Analysis. IEEE Transactions on Nuclear Science, 2007, 54, 245-251.	2.0	3
86	Residual Convolutional Neural Networks to Automatically Extract Significant Breast Density Features. Communications in Computer and Information Science, 2019, , 28-35.	0.5	3
87	Detection and classification of microcalcifications clusters in digitized mammograms. , 0, , .		2
88	A 7T double-tuned (¹H/³¹P) microstrip surface RF coil for the IMAGO7 MR scanner. , 2015, , .		2
89	A non-invasive method for a quantitative evaluation of muscle involvement in MRI of Neuromuscular Diseases. , 2015, , .		2
90	Machine learning techniques implemented ON structural MRI features at different spatial scales for preschoolers with autism spectrum disorders. Physica Medica, 2016, 32, 128.	0.7	2

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91	Double-Tuned Surface 1Hâ€“23Na Radio Frequency Coils at 7 T: Comparison of Three Decoupling Methods. Applied Magnetic Resonance, 2019, 50, 649-661.	1.2	2
92	Radiomic and Dosiomic Profiling of Paediatric Medulloblastoma Tumours Treated with Intensity Modulated Radiation Therapy. Communications in Computer and Information Science, 2019, , 56-64.	0.5	2
93	GPCALMA: a grid approach to mammographic screening. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 394-398.	1.6	1
94	Chest CT automatic analysis for lung nodules detection implemented on a GPU computing system. , 2012, , .		1
95	Realistic Estimation of the local Specific Absorption Rate of human head in MR scanner at 7T. , 2013, , .		1
96	Local SAR in adults and children at 7T MR: Realistic estimation by the using of simulations. , 2014, , .		1
97	Non-invasive assessment of Neuromuscular Disorders by 7 tesla Magnetic Resonance Imaging and Spectroscopy: Dedicated radio-frequency coil development. , 2015, , .		1
98	Medical image processing using brain emulation. , 2016, , .		1
99	Sodium imaging of the human knee cartilage with magnetic resonance at ultra high field: Development of a double frequency (¹H/²³Na) RF coil. , 2017, , .		1
100	Technological challenges in Magnetic Resonance Imaging: enhancing sensitivity, moving to quantitative imaging and searching for disease biomarkers. Journal of Instrumentation, 2018, 13, C02007-C02007.	1.2	1
101	A new method to evaluate the average absorbed dose in mammography and breast tomosynthesis. , 2018, , .		1
102	Assessment of ultra-high-field Magnetic Resonance Imaging safety via temperature increase monitoring with Magnetic Resonance Thermometry. , 2020, , .		1
103	M5L: A web-based Computer Aided Detection system for automated search of lung nodules in thoracic Computed Tomography scans. , 2015, , 193-199.		1
104	Quantitative Scoring of Muscle Involvement in MRI of Neuromuscular Diseases. , 2015, , .		1
105	Evaluation of Dosimetric Properties in Full Field Digital Mammography (FFDM). , 2018, , .		1
106	Residual Convolutional Neural Networks for Breast Density Classiï¬€cation. , 2019, , .		1
107	GPCALMA: A Tool For Mammography With A GRID-Connected Distributed Database. AIP Conference Proceedings, 2003, , .	0.4	0
108	Characterization Of A Single Photon Counting Imaging System By The Transfer Functions Analysis. , 0, , .		0

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109	Special session in thoracic CAD. International Journal of Computer Assisted Radiology and Surgery, 2007, 2, 351-372.	2.8	0
110	Lung uniformization for juxta-pleural nodule detection. , 2008, , .		0
111	Selective reduction of CAD false-positive findings. , 2010, , .		0
112	Evaluation of 3D radio-frequency electromagnetic fields for any matching and coupling conditions by the use of basis functions. Journal of Magnetic Resonance, 2015, 261, 38-42.	2.1	0
113	Automated hippocampus segmentation with the Channeler Ant Model: Results on different datasets. , 2015, , .		0
114	Robustness of 7T-MRI Flexible Array Coil Behaviour. , 2017, , .		0
115	252. Prediction of subject-specific SAR distribution in MSK MR exam at 7â€¯T. Physica Medica, 2018, 56, 217-218.	0.7	0
116	Double Tuned 1H-23Na Birdcage Coils for MRI at 7 T : Performance evaluation through electromagnetic simulations. , 2018, , .		0
117	A Web-based Computer Aided Detection System for Automated Search of Lung Nodules in Thoracic Computed Tomography Scans. , 2015, , .		0