Maria Evelina Fantacci

List of Publications by Year
in descending order

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121	2,632	331670	223800
papers	citations	21 h-index	46 g-index

121	121	121	2699
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Convolutional Neural Networks for Breast Density Classification: Performance and Explanation Insights. Applied Sciences (Switzerland), 2022, 12, 148.	2.5	8
3	Technical evaluation of image quality in synthetic mammograms obtained from 15Â° and 40Â° digital breast tomosynthesis in a commercial system: a quantitative comparison. Physical and Engineering Sciences in Medicine, 2021, 44, 23-35.	2.4	4
4	A comprehensive assessment of physical image quality of five different scanners for head CT imaging as clinically used at a single hospital centreâ€"A phantom study. PLoS ONE, 2021, 16, e0245374.	2.5	6
5	Normalized glandular dose coefficients for digital breast tomosynthesis systems with a homogeneous breast model. Physics in Medicine and Biology, 2021, 66, 065024.	3.0	8
6	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
7	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
8	A cloud-based computer-aided detection system improves identification of lung nodules on computed tomography scans of patients with extra-thoracic malignancies. European Radiology, 2019, 29, 144-152.	4.5	24
9	MR Compatible Power Supply Module for PET Detectors of an Integrated PET/MR System. IEEE Transactions on Radiation and Plasma Medical Sciences, 2019, 3, 454-464.	3.7	2
10	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
11	The potential contribution of artificial intelligence to dose reduction in diagnostic imaging of lung cancer. Journal of Medical Artificial Intelligence, 2019, 2, 6-6.	1.1	1
12	MRIndex: A tool for evaluating muscle involvement in neuromuscular diseases from MRI images. , 2019, , .		3
13	Comprehensive assessment of image quality in synthetic and digital mammography: a quantitative comparison. Australasian Physical and Engineering Sciences in Medicine, 2019, 42, 1141-1152.	1.3	8
14	Residual Convolutional Neural Networks to Automatically Extract Significant Breast Density Features. Communications in Computer and Information Science, 2019, , 28-35.	0.5	3
15	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
16	A new method to evaluate the average absorbed dose in mammography and breast tomosynthesis. , 2018, , .		1
17	InGene: a multimodal approach to the genotype-phenotype association in neuromuscular diseases. , 2018, , .		1
18	Computed tomography imaging with the Adaptive Statistical Iterative Reconstruction (ASIR) algorithm: dependence of image quality on the blending level of reconstruction. Australasian Physical and Engineering Sciences in Medicine, 2018, 41, 463-473.	1.3	10

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19	Evaluation of Dosimetric Properties in Full Field Digital Mammography (FFDM). , 2018, , .		1
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	ARIANNA: A research environment for neuroimaging studies in autism spectrum disorders. Computers in Biology and Medicine, 2017, 87, 1-7.	7.0	7
22	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
23	Validation, comparison, and combination of algorithms for automatic detection of pulmonary nodules in computed tomography images: The LUNA16 challenge. Medical Image Analysis, 2017, 42, 1-13.	11.6	710
24	Computer-aided detection systems to improve lung cancer early diagnosis: state-of-the-art and challenges. Journal of Physics: Conference Series, 2017, 841, 012013.	0.4	6
25	Average absorbed breast dose in mammography: a new possible dose index matching the requirements of the European Directive 2013/59/EURATOM. European Radiology Experimental, 2017, 1, 28.	3.4	8
26	Evaluation of the Imaging Properties of a CT Scanner with the Adaptive Statistical Iterative Reconstruction Algorithm - Noise, Contrast and Spatial Resolution Properties of CT Images Reconstructed at Different Blending Levels. , 2017, , .		0
27	90P: Clinical validation of the M5L lung computer-assisted detection system. Journal of Thoracic Oncology, 2016, 11, S95.	1.1	0
28	Non-invasive assessment of Neuromuscular Disorders by 7 tesla Magnetic Resonance Imaging and Spectroscopy: Dedicated radio-frequency coil development. , 2015, , .		1
29	Large scale validation of the M5L lung CAD on heterogeneous CT datasets. Medical Physics, 2015, 42, 1477-1489.	3.0	91
30	Automated hippocampus segmentation with the Channeler Ant Model: Results on different datasets. , 2015, , .		0
31	A non-invasive method for a quantitative evaluation of muscle involvement in MRI of Neuromuscular Diseases. , 2015, , .		2
32	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
33	Quantitative Scoring of Muscle Involvement in MRI of Neuromuscular Diseases. , 2015, , .		1
34	Chest CT automatic analysis for lung nodules detection implemented on a GPU computing system. , 2012, , .		1
35	Fully automated hippocampus segmentation with virtual ant colonies. , 2012, , .		5
36	On-demand lung CT analysis with the M5L-CAD via the WIDEN front-end web interface and an OpenNebula-based cloud back-end. , 2012, , .		1

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37	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
38	Approaches to juxta-pleural nodule detection in CT images within the MAGIC-5 Collaboration. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 648, S103-S106.	1.6	11
39	Algorithms for automatic detection of lung nodules in CT scans. , 2011, , .		4
40	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
41	3-D object segmentation using ant colonies. Pattern Recognition, 2010, 43, 1476-1490.	8.1	24
42	A voxel-based neural approach (VBNA) to identify lung nodules in the ANODE09 study. , 2009, , .		11
43	Characterization of a mammographic system based on single photon counting pixel arrays coupled to GaAs xâ€ray detectors. Medical Physics, 2009, 36, 1330-1339.	3.0	12
44	Pleural nodule identification in low-dose and thin-slice lung computed tomography. Computers in Biology and Medicine, 2009, 39, 1137-1144.	7.0	36
45	A novel multithreshold method for nodule detection in lung CT. Medical Physics, 2009, 36, 3607-3618.	3.0	73
46	Automatic analysis of medial temporal lobe atrophy from structural MRIs for the early assessment of Alzheimer disease. Medical Physics, 2009, 36, 3737-3747.	3.0	39
47	MAGIC-5: an Italian mammographic database of digitised images for research. Radiologia Medica, 2008, 113, 477-485.	7.7	22
48	Lung nodule detection in low-dose and thin-slice computed tomography. Computers in Biology and Medicine, 2008, 38, 525-534.	7.0	80
49	Dental radiology dosimetric data as routinely collected in an Italian hospital. Radiation Protection Dosimetry, 2008, 129, 227-230.	0.8	2
50	A pixel detector-based single photon-counting system as fast spectrometer for diagnostic x-ray beams. Radiation Protection Dosimetry, 2008, 129, 119-122.	0.8	5
51	Automatic Localization of the Hippocampal Region in MR Images to Asses Early Diagnosis of Alzheimerâ€™s Disease in MCI Patients. , 2008, , .		1
52	Multi-scale analysis of lung computed tomography images. Journal of Instrumentation, 2007, 2, P09007-P09007.	1.2	8
53	An automated system for lung nodule detection in low-dose computed tomography. , 2007, , .		15
54	Characterization of a Single Photon Counting Imaging System by Transfer Function Analysis. IEEE Transactions on Nuclear Science, 2007, 54, 245-251.	2.0	3

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55	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
56	A GaAs pixel detectors-based digital mammographic system: Performances and imaging tests results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 576, 154-159.	1.6	9
57	Distributed medical images analysis on a Grid infrastructure. Future Generation Computer Systems, 2007, 23, 475-484.	7.5	25
58	Mammogram Segmentation by Contour Searching and Mass Lesions Classification With Neural Network. IEEE Transactions on Nuclear Science, 2006, 53, 2827-2833.	2.0	86
59	Lung Nodule Detection in Screening Computed Tomography. , 2006, , .		10
60	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
61	Preliminary study to optimize the irradiation condition for future application in small animal CT. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 563, 142-145.	1.6	2
62	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
63	A completely automated CAD system for mass detection in a large mammographic database. Medical Physics, 2006, 33, 3066-3075.	3.0	92
64	Comparison of two portable solid state detectors with an improved collimation and alignment device for mammographic x-ray spectroscopy. Medical Physics, 2006, 33, 3469-3477.	3.0	30
65	Performances of different digital mammography imaging systems: Evaluation and comparison. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 546, 14-18.	1.6	7
66	Performance of an imaging system based on silicon pixel detectors of different thickness. IEEE Transactions on Nuclear Science, 2005, 52, 1989-1993.	2.0	3
67	Preprocessing methods for nodule detection in lung CT. International Congress Series, 2005, 1281, 1099-1103.	0.2	9
68	A study on two different CAD systems for mammography as an aid to radiological diagnosis in the search of microcalcification clusters. European Journal of Radiology, 2005, 55, 264-269.	2.6	8
69	An example of technological transfer to industry: the â€œIMIâ€•project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 376-379.	1.6	7
70	A prototype for a mammographic head and related developments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 382-385.	1.6	14
71	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
72	Characterization of Si pixel detectors of different thickness. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 518, 418-420.	1.6	8

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73	A Medipix2-based imaging system for digital mammography with silicon pixel detectors. IEEE Transactions on Nuclear Science, 2004, 51, 3081-3085.	2.0	17
74	Semiconductor pixel detectors for digital mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 509, 283-289.	1.6	10
75	GPCALMA, a mammographic CAD in a GRID connection. International Congress Series, 2003, 1256, 944-949.	0.2	4
76	Full-field images of mammographic phantoms obtained with a single photon counting system. , 2003, , .		0
77	Comparison between different monitors to be used in the reading of digital mammographic images. , 2003, , .		2
78	Diagnostic performance of radiologists with and without different CAD systems for mammography. , 2003, 5034, 51.		6
79	Experimental study of Compton scattering reduction in digital mammographic imaging. IEEE Transactions on Nuclear Science, 2002, 49, 2361-2365.	2.0	13
80	Search of microcalcification clusters with the CALMA CAD station. , 2002, , .		10
81	Experimental test of a new technique of background suppression in digital mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 478, 95-97.	1.6	2
82	Purification, cloning and characterisation of odorant- and pheromone-binding proteins from pig nasal epithelium. Cellular and Molecular Life Sciences, 2001, 58, 823-834.	5.4	34
83	Investigation on semi-insulating GaAs detectors using laser-induced current pulses. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 458, 158-163.	1.6	8
84	Test of a GaAs-based pixel device for digital mammography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 460, 50-54.	1.6	9
85	The CALMA project: a CAD tool in breast radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 460, 107-112.	1.6	12
86	Detection performance of SI GaAs detectors for nuclear medicine. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 460, 123-126.	1.6	6
87	Evaluation of the imaging properties of a direct detection single photon counting based system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 389-392.	1.6	7
88	Performance of a medical imaging system for photons in the 60â€“140 keV energy range. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 422-424.	1.6	8
89	The CALMA project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 428-429.	1.6	7
90	Spectroscopic and imaging capabilities of a pixellated photon counting system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 466, 74-78.	1.6	8

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91	Comparison of imaging properties of several digital radiographic systems. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 466, 95-98.	1.6	5
92	Simulated and experimental spectroscopic performance of GaAs X-ray pixel detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 466, 188-193.	1.6	6
93	Low contrast imaging with a GaAs pixel digital detector. IEEE Transactions on Nuclear Science, 2000, 47, 1478-1482.	2.0	21
94	MEDIPIX: a VLSI chip for a GaAs pixel detector for digital radiology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 422, 201-205.	1.6	31
95	GaAs pixel radiation detector as an autoradiography tool for genetic studies. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 422, 242-246.	1.6	19
96	Spectroscopic performance of semi-insulating GaAs detectors for digital radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 422, 247-251.	1.6	16
97	Radiation damage tests of GaAs HV switches for MSGCs bias control. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 426, 216-220.	1.6	0
98	GaAs detector optimization for different medical imaging applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 434, 14-17.	1.6	10
99	Irradiation of optically activated SI-GaAs high-voltage switches with low and high energy protons. IEEE Transactions on Nuclear Science, 1999, 46, 121-125.	2.0	1
100	SI-GaAs detectors with epitaxial junction. IEEE Transactions on Nuclear Science, 1999, 46, 171-175.	2.0	2
101	Optically activated planar GaAs switches for DC applications. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 418, 434-439.	1.6	3
102	Development of semi-insulating GaAs detectors for digital radiography. Nuclear Physics, Section B, Proceedings Supplements, 1998, 61, 633-637.	0.4	9
103	Experimental results on GaAs switching devices for HEP. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 410, 26-28.	1.6	0
104	GaAs devices with vertical and planar structures for optically activated high-voltage switching. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 417, 124-130.	1.6	3
105	Use of silicon and GaAs pixel detectors for digital autoradiography. IEEE Transactions on Nuclear Science, 1997, 44, 929-933.	2.0	18
106	A study of the trap influence on the performance of semi-insulating GaAs detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 395, 349-354.	1.6	9
107	Gallium arsenide pixel detectors for medical imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 395, 148-151.	1.6	20
108	A study of the electrical and charge-collection properties of semi-insulating GaAs detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 380, 66-69.	1.6	5

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109	Experimental study of LEC GaAs detectors for X-ray digital radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 380, 410-413.	1.6	13
110	Autoradiography with silicon strip detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 381, 527-530.	1.6	17
111	Some new results on semi-insulating GaAs detectors for low energy X-rays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 355, 425-427.	1.6	16
112	X-ray imaging using a pixel GaAs detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 362, 547-550.	1.6	7
113	Electrical characterization and detection performances of various semi-insulating GaAs crystals for low energy gamma-rays. IEEE Transactions on Nuclear Science, 1995, 42, 254-257.	2.0	8
114	Comparison of different GaAs detectors for X-ray digital radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 338, 549-555.	1.6	14
115	Electrical characterization and detector performances of a LPE GaAs detector for X-ray digital radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 346, 372-378.	1.6	10
116	X-ray imaging test of a /spl mu/-strip silicon detector with a transputer DAQ. IEEE Transactions on Nuclear Science, 1994, 41, 1522-1525.	2.0	6
117	Digital imaging in radiology: preliminary results obtained with a high spatial resolution 2D silicon detector. IEEE Transactions on Nuclear Science, 1993, 40, 987-991.	2.0	14
118	Characterization of the response of a double side mu -strip silicon detector to X-rays in the diagnostic energy range. IEEE Transactions on Nuclear Science, 1993, 40, 983-986.	2.0	12
119	First X-ray images with a double-sided microstrips silicon crystal. A novel detector for digital radiography?. Physics in Medicine and Biology, 1992, 37, 1167-1170.	3.0	22
120	Study of GaAs detectors characteristics for medical imaging. , 0, , .		2
121	Characterization Of A Single Photon Counting Imaging System By The Transfer Functions Analysis. , 0, , .		0